THE IMPERATIVE TOPIC OF NORMATIVE LANGUAGE

A Dissertation

Presented to the Faculty of the Graduate School

of Cornell University

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

by

Andrew Alwood

January 2012

THE IMPERATIVE TOPIC OF NORMATIVE LANGUAGE

Andrew Alwood, Ph. D.

Cornell University 2012

Normative language is characteristically used in ethical discussions about what we *must* do, what we *should* do, and what we *may* do. It is also used to discuss rather mundane issues where we need to coordinate our activities, e.g. what to do for dinner tonight, and to describe rules and requirements, e.g. what the law requires of us.

This dissertation isolates a distinctively linguistic debate about the nature of normative meanings: Do they function to convey information or do they function to direct action? Several groups of linguistic data are marshaled in support of a positive answer to both of these questions. In particular, in chapter one, similarities between the deontic modals 'must', 'may', and 'should' and imperative sentences like 'Do it!' are described in detail.

Chapter two explains the linguistic data from chapter one by constructing a theory on which normative meanings include imperatival meanings. The distinctive feature of normative meanings is what they are used to do (to require, to advise, to permit) as well as what they are used to talk about (obligations, values).

Chapter three extends the theory so that it explains how the meanings of complex sentences are determined compositionally by the meaning and arrangement of their parts. This responds to a trenchant objection from Peter Geach who claimed that such a compositional theory is impossible. This chapter also compares the theory with metaethical expressivism.

BIOGRAPHICAL SKETCH

Andrew Alwood obtained his Masters and Doctorate degrees from the Sage School of Philosophy at Cornell University. Before that, he obtained his Bachelor of Arts degree from the University of Florida, with a double major in Philosophy and Classics.

ACKNOWLEDGMENTS

In submitting this dissertation, I hereby express gratitude to my academic advisors for their invaluable guidance: Nick, Matti, Terry, and Mark.

Thank you very much.

TABLE OF CONTENTS

The Imperative Topic of Normative Language

by Andrew Alwood

Chapter One

Arguments for Nondescriptivism

Amongst several related debates in metaethics, such as realism vs irrealism about moral facts, and cognitivism vs noncognitivism about moral psychology, there is a distinctively linguistic debate between descriptivism and nondescriptivism. Descriptivists claim that the meanings of moral or broadly normative language are completely determined by what they are *about*, i.e. what they contribute to informational content. Nondescriptivists deny this, and thus they either think that there is more to the meanings of normative language, or else they deny that such language contributes to informational content at all.

Descriptivism is the conjunction of a positive and a negative claim, according to which normative language has descriptive meaning and lacks nondescriptive meaning:

(D+) Normative language contributes meaning to informational content
(D-) Normative language does not have nondescriptive conventional meaning

Nondescriptivism either denies both (D+) and (D-) and thus claims that normative language has only nondescriptive meaning (*pure nondescriptivism*), or else it only denies (D-)

and thus claims that normative language has both descriptive and nondescriptive meaning (*hybrid nondescriptivism*).

Since this debate is distinctively linguistic, considerations from the philosophy of language and linguistics are quite important. This dissertation is devoted to illuminating the debate over the nature of normative meanings, by focusing on such linguistic considerations. In particular, I will argue that the positive claims of both descriptivism and nondescriptivism can be supported on distinctively linguistic grounds. That is, I will argue for hybrid nondescriptivism.

Of course, ultimately we want theoretical explanations of the linguistic considerations that will be raised in this chapter. That will be the topic of chapter two. This chapter serves to set out the linguistic considerations with few theoretical assumptions or explanations.

I begin, in section 1, by arguing for (D+). I show two ways of supporting the claim that deontic 'must' contributes to the informational content of sentences it occurs in. In section 2, I begin to explain why one might think that normative sentences also have nondescriptive meaning, by introducing data involving the "performative" uses of such language to perform nonassertive speech-acts. This draws out some rough similarities between normative language and a paradigm of nondescriptive language: an imperative sentence such as 'Do it!'.

In section 3, I begin to argue for nondescriptivism by comparing and contrasting the many different expressions for deontic necessity. The similarities and differences need to be explained, and a good explanation will likely involve imperatival speech-acts.

The main arguments in this chapter are explained in sections 4 through 7. They intend to conclude that the similarities between certain normative and imperative sentences are not mere coincidences of language use, but rather reflect a connection in their conventional meanings.

Normative sentences bear semantic relations to imperative sentences. Here is a rough summary of the arguments:

- 'Do it, but you must not do it' is *inconsistent* because it both directs an addressee to perform an action and also to not perform it
- 'You must do it. And furthermore, do it!' is *redundant* because it twice attempts to direct an addressee to perform an action
- Responding to an imperative 'Do it!' by saying 'No' is *equivalent* to denying the normative claim 'You must do it': such denials at least implicitly permit one to ignore the directive to perform an action
- A normative question such as 'Should I do it?' can be directly *answered* by an imperative 'Yes, do it!' or 'No, don't do it!'

I also examine, in section 8, how deontic modals like 'must' are used to translate foreign sentences with imperatival meanings. But the theory developed in chapters two and three will not rely upon that argument from translation. Instead, the theory will focus (in chapter two) on explaining the arguments from sections 4 through 7, and then (in chapter three) it will be developed into a compositional semantic theory that integrates mood and modality.

The arguments in this chapter draw out linguistic data connecting normative and imperative sentences with semantic notions like inconsistency and the question-answer relationship. I claim that these data need to be explained by a theory of normative semantics, although in this chapter I only indicate in general outlines what kind of explanation is called for. Instead, the purpose of this chapter is to examine and analyze the linguistic data.

Section 1: Normative Sentences have Descriptive Content

There are several reasons why we should think that normative language is descriptive. We call normative sentences like 'You must not steal', and also their utterances, true or false. We use normative sentences to convey information. Also, we try to rationally deliberate and

argue about such information, adducing reasons and evidence, just as we do for the information involved with ordinary assertive declarative sentences.

I assume that a word has descriptive meaning if it makes a meaningful contribution to informational content. Deontic modals such as 'must' straightforwardly make meaningful contributions to the informational contents of sentences in which they occur. This can be shown by two sets of considerations which isolate the informational content of a sentence. One focuses on how deontic modals embed in more complex sentences. The other focuses on what is rejected or accepted in dissenting from or assenting to a normative sentence.

Section 1.1: Embedding

First, deontic modals semantically embed in conditional antecedents, negation, interrogatives, indirect speech, factive verbs, and other constructions.

(1a) If we must finish the project by Friday, then the materials need to be ordered now.
(1b) It's not the case that we must finish the project by Friday.
(1c) Must we finish the project by Friday?
(1d) John said that we must finish the project by Friday.
(1e) The fact that we must finish the project by Friday is looming over our deliberations.

In each case, the meaningful contribution of 'must' has to be interpreted inside the scope of the operators contributed by embedding words like 'if', 'it's not the case that', 'John said that', etc. In these sentences, it is the information *that we must finish the project by Friday* that is hypothesized, negated, questioned, etc. So, 'must' contributes to their informational content.

Other expressions do not semantically embed, such as the parenthetical uses of adverbs like 'frankly'. (Note that it is only these parenthetical uses of 'frankly' that I am focusing on here; the word can also be used as a normal adverb.)

(2a) Jim is unable to do the job, frankly.
(2b) If Jim is unable to do the job, frankly, then someone else should be asked to do it.
(2c) It's not the case that Jim is unable to do the job, frankly.
(2d) Is Jim unable to do the job, frankly?
(2e) John said that Jim is unable to do the job, frankly.
(2f) The fact that Jim is unable to do the job, frankly, makes him less valuable to our company.

The information being hypothesized, negated, questioned, etc., in these examples is *that Jim is unable to do the job*, which doesn't include a contribution from 'frankly'. The salient reading of each of (2a), (2b), (2c), and (2f) is such that whoever uses it is being frank. (2d) asks the respondent to be frank in answering its question. (2e) reports that John's act of saying was frank, or else it would be the speaker using (2e) who is being frank in reporting what John said. The meaning contributed by 'frankly' doesn't embed in (2a) – (2f). For such reasons, parenthetical adverbs seem to be modifying a speech-act rather than contributing to informational content.

Section 1.2: Dissent and assent

Second, when speakers dissent from, or assent to, a sentence or utterance such as (3a), the contribution of 'must' is involved in what is dissented from or assented to.

(3a) We must finish the project by Friday.

(3b) That's true, we must finish by then.
(3c) No, that's not true, we don't have to finish by then.

It is the information *that we must finish the project by Friday* that is assented to in (3b) and dissented from in (3c). So, 'must' makes a difference to the informational content of (3a).

This distinguishes 'must' from the occurrences of 'frankly' below.

(4a) Jim is unable to do the job, frankly.

(4b) That's true, he is unable to do it.
(4c) No, that's not true, he can do it.

(4d)# No, that's not true, you aren't being frank.
(4e)# No, that's not true, it isn't frank that Jim is unable to do the job.

The information in (4a) being assented to in (4b) and dissented from in (4c) is *that Jim is unable to do the job*, which doesn't include a contribution from 'frankly'. Of course, an utterance of (4a) does put the property of being frank into the discourse, but that property isn't ascribed to any constituent of the informational content of (4a). It's rather ascribed to the speaker of (4a), or the speech-event of uttering it. And that ascription of being frank isn't available for direct denial, as the infelicity of (4d) shows. Saying 'that's not true' in response to (4a) cannot sensibly be meant as a denial of the speaker's frankness.

Section 1.3: The relevance of the preceding considerations

What exactly do these two sets of considerations show?

Since some expressions fail to semantically embed and fail to be part of what is denied or assented to, they do not affect the informational content of the relevant sentences (i.e., the main informational content, if the sentence is associated with more than one). I will assume that informational contents are *propositions*, and also that the main informational content associated with a sentence is tightly linked with its *truth-conditions*. So, the arguments of the previous two sections show that some expressions do not contribute to the truth-conditions of, nor to the (main) propositions expressed by, sentences in which they occur.[1]

[1] I don't wish to deny that 'frankly' lacks descriptive meaning, only that its parenthetical uses do not affect the truth-conditions of the relevant sentences. It is possible that such uses of 'frankly' trigger the expression of a secondary

Other expressions do semantically embed and are part of what is denied or assented, and therefore they do contribute to truth-conditions and propositional content. Importantly, though, this result is compatible with those expressions *also* making some other type of meaningful contribution to the sentences they occur in.

Since deontic 'must' semantically embeds and affects what is denied or assented, we have good reason to believe it *does* contribute to the informational contents of the sentences it occurs in. But that does not mean it fails to make some other kind of meaningful contribution to sentences it occurs in.

As I introduced it, descriptivism is the conjunction of a positive and a negative claim

(D+) Normative language contributes meaning to informational content
(D-) Normative language does not have nondescriptive conventional meaning

Nondescriptivism is the denial of descriptivism, as I have said, and it thus takes two forms. Pure nondescriptivism denies that normative language has descriptive meaning, and thus rejects (D+) as well as (D-). Hybrid nondescriptivism only rejects (D-); it agrees that normative language has descriptive meaning while maintaining that such words *also* have nondescriptive meaning.

The arguments in sections 1.1 and 1.2 are arguments for (D+); thus they are also arguments against pure nondescriptivism. But they are compatible with the hybrid nondescriptivist project that purports to expand upon the positive claims of descriptivism.

---

proposition which does not co-vary with the truth-conditions of the sentence that expresses it. For example, the information *that the speaker using (4a) is being frank* might be expressed by (4a), but it is not *asserted* by an ordinary use of (4a) and it does not help determine the truth-conditions of (4a). This diagnosis would involve distinguishing the main informational content of a sentence, which is the focus of the arguments in sections 1.1 and 1.2, from secondary informational contents that could be associated with a sentence.

So, why think that normative language involves nondescriptive meaning? In the next section, I will explain some reasons that support hybrid nondescriptivism, even though they are not conclusive. In sections 4 through 7, I will examine in detail some arguments that confirm more solidly that deontic modals have imperatival meaning.

Section 2: Normative and Imperative Sentences can be used in the Same Ways

Section 2.1: The argument from use

One of the more obvious reasons to suspect that normative language has some kind of nondescriptive meaning is the fact that ordinary speakers typically use such language to perform distinctive speech-acts that do not simply describe the way the world is. The sentence 'You must do it' is an effective tool to be used to *require* or *obligate* someone, or at least to attempt to do so. 'You may do it' is used to *permit* a certain course of action. 'You should do it' is used to *recommend* or *advise* action.

Interestingly, these acts are also readily performed using imperative sentences, a paradigm of nondescriptive language. Using an imperative is the most direct way to tell an addressee what to do. Such attempts can vary in strength from a command to a request to an invitation. In the jargon of speech-act theory, we can say that imperatives are suited for *directive* acts: acts whose purpose is to guide or direct action. An addressee can figure out which particular act is being performed in an imperative utterance by looking for contextual clues. For example, the following imperative sentences are likely to be used in contexts that make it clear which types of speech-acts they are being used to perform:

(5a) Finish your chores! (command)
(5b) Please, help me tidy up! (request)
(5c) Wait until the price is right! (advice)
(5d) Take as many as you like! (permission/invitation)

In the right context, using an imperative can have the very same effect as using normative language; that is, such uses perform the same speech acts.

parent to child
(6a) Finish your chores! (requirement)
(6b) You must finish your chores.

there is a knock at the door
(7a) Come in! (permission)
(7b) You may come in.

"I cannot decide between the red one and the blue one. What do you think?"
(8a) Choose the red one! (advice)
(8b) You should choose the red one.

It seems that while an imperative utterance can be specified in context to have the illocutionary force of a requirement, permission, advice or any other directive act, such as a request, normative words like 'must', 'may', and 'should' are more restricted in how they are to be used. Their meanings suit them more specifically for particular directive acts. Normative meanings are not suited for requesting, although they are suited for advising, requiring, and permitting.

This seems to be an interesting similarity between normative language and the imperative mood, one which would make descriptivism false if it showed that normative language has a conventional meaning that suits it to direct action relevantly like the meaning of imperatives.

But descriptivists need not find the argument from use convincing. They can draw a principled distinction between the meaning of a sentence and the many ways that that sentence can be used to convey information or perform speech-acts. This distinction can be demonstrated by Grice's conversational implicatures, which show how an audience who is competent with the meaning of a sentence can understand what a speaker is trying to communicate, something that goes beyond the literal meaning of the words used, by paying attention to conversational maxims about cooperative behavior.

Now, descriptivists would be correct to point out that words can be used in ways that go beyond their literal meanings. So, they are correct to highlight the possibility that the connection between normative language and illocutionary force might be explained along the lines of Grice's conversational implicatures.

But that is not enough to prevail in their dispute with nondescriptivists, for the distinction between meaning and use does not prevent the existence of conventional correlations between sentence-meanings and illocutionary forces. The difference between imperative and declarative sentences shows this point. Although an imperative and a declarative can be about the same state of affairs, they are obviously suited for being used in different ways.

(9) John will be back in ten minutes.
(10) John, be back in ten minutes!

The sentence-moods, or clause-types, such as the declarative, imperative, and interrogative, are the paradigm way in which illocutionary force can become conventionally correlated with sentence-meanings. The mood of a sentence shows which kinds of speech-acts can be performed by using the sentence literally. The imperative mood suits a sentence to be used to guide or direct action, whereas the declarative mood suits a sentence to be used to convey

information and make assertions, and the interrogative mood suits a sentence to be used to ask questions.

These correlations between sentence-meaning and speech-acts reflect distinct fundamental purposes of communication relating to the exchange of information and the coordination of action. It is a robust cross-linguistic fact, well documented for many natural languages, that moods reflect conventional correlations between sentence-meaning and illocutionary force.[2] Contemporary linguists even identify sentence-moods in terms of language use.[3]

Although there is an important distinction between the meaning of sentences and the uses to which they are put in particular contexts of utterance, this distinction allows for some overlap of meaning and use. Sentences can be conventionally correlated with characteristic types of use.

Section 2.2: How to proceed in this debate

This dialectical back-and-forth over the argument-from-use leaves the dispute between descriptivists and nondescriptivists unsettled. The argument-from-use is inconclusive by itself, but likewise the descriptivist response to distinguish between meaning and use is also inconclusive. The question remains whether the connection between normative language and the distinctive illocutionary forces with which they are often used is conventionalized or not.

Descriptivists might try to explain away any appearance of convention by offering "pragmatic explanations" of how normative sentence-meaning gets used for such purposes.

Nondescriptivists need to develop arguments that show that the connection between normative language and imperatives is conventional, i.e. part of their standing meanings and thus

[2] Saddock and Zwicky 1985
[3] Konig and Siemund 2007, p. 278 clarifies that as the authors are categorizing sentences "we are looking for grammatical distinctions that can be correlated with a certain use of potential or illocutionary functions."

something that must be at least tacitly understood in order to be competent with them, rather than merely a feature of common use.

The rest of chapter one will offer and examine considerations that English deontic modals are conventionally correlated with their characteristic, nondescriptive uses. Before getting to the arguments, however, it is worth pausing on the data appealed to in the argument from use. It was claimed that deontic modals are used to perform nonassertive acts. But they are also used to perform assertive acts. If they can be used to do both, what makes for the difference?

Section 2.3: Performative uses and descriptive uses of deontic modals

The argument from use focuses on the uses of normative language that attempt to guide action. We can call such uses *performative,* as opposed to those uses that are *merely descriptive*. A descriptive use of (11) would report information, e.g. conveying that one's addressee has an obligation to apologize, and thus would perform an assertive speech-act. A performative use of (11) would attempt to influence the behavior of one's addressee, e.g. by creating an obligation for the addressee to apologize, and thus would perform a nonassertive act.

(11) You must apologize

A descriptive use of (11) can be evaluated as true or false, by checking the relevant facts involved with what the addressee is obligated to do. The performative use, insofar as it is a nonassertive act, is not itself evaluable as true or false. But it is plausible that a performative use of (11) can also involve an assertion that is made true by successful performance of the nonassertive act: by requiring the addressee to apologize, one makes it true that the addressee is

required to apologize and so must apologize. The difference in the two uses can sometimes be brought out by adding details about the source of the obligation.

(12) You are obligated to apologize (according to the rules of the game we are playing)
(13) You are obligated to apologize (because I just said so!)

If the source of the obligation is not specified, it might be unclear whether the speaker is merely reporting information or instead is actively trying to change the situation. But even if the speaker makes it explicit that the source of obligation is "external", such as rules or laws laid down by others, it might be unclear whether the speaker is citing them in an attempt to guide action or in an attempt to merely inform. Sometimes we *endorse* the rules we report on, and other times we merely report on them. For example, it is possible to use (14) as part of an attempt to tell a driver to slow down. In such a case, one cites rules in order to explain why an addressee should do what he is told. But another way of using (14) could be felicitously followed by denying that one endorses the relevant rules. That would indicate that one was using (14) merely descriptively, without endorsing the rules one was reporting on.

(14) According to (the rules determining) the speed limit, you must drive under 65 mph

(14-unendorsed) …but I don't care if you violate those rules, I was only telling you what they require.
(14-endorsed) …and I fully expect you to follow those rules.

Performative uses of deontic modals always involve the speaker making an attempt to guide behavior. Oftentimes, the original source of that guidance is the speaker and is an attempt to exert the speaker's will. But the speaker herself doesn't have to be the source of the restriction on action, since she can endorse rules or laws that originate from an external source. And, as I will soon explain, a performative use need not involve the speaker's will. The essential

difference between a performative use and a merely descriptive use is that the former involves endorsement.

While endorsement is necessary for a performative use, adding it to a descriptive utterance is not always sufficient to make the utterance performative. If a performative use of 'must' is an act that creates an obligation, then only a speaker with the relevant *authority* can use it that way.[4] When someone with authority uses 'must' to create an obligation, the utterance counts as a *command*. A command is an authoritative act of creating a requirement or obligation. (Note: I use 'requirement' and 'obligation' to mean the same thing.) Not just any speaker has the power to create obligations. For example, if a child were to say (11) to an adult, in an attempt to get the adult to apologize, no one would think the child successfully created an obligation for the adult, even if the attempt succeeds in getting an apology made. The child might unsuccessfully attempt to command, or the child might successfully perform a similar directive act that doesn't require authority, e.g. making a demand. Similar claims hold for official subordinates and their official superiors.

This is a way that some directive actions differ from others: it is possible to guide the actions of a friend by giving *advice* or making a *recommendation*, even though one cannot create an obligation for a friend without having the relevant authority. When advising a friend to apologize, it makes more sense to use (15) rather than (11); this suggests that a performative use of 'should' does not presume authority as a performative use of 'must' does.

[4] It is plausible that one can use 'must' performatively, to guide action, without thereby *creating* an obligation. For example, one can report that an authoritative command was given to the effect that John must sit down. Thus, it seems possible for an assertive use of 'must' to inform an audience about requirements that weren't already recognized in that conversation. Such assertive uses can also be performative; as long as the speaker is endorsing the requirements she is reporting on her utterance is an attempt to guide action. A theoretical explanation of performative uses should be able to distinguish such assertions-with-endorsement from the act of more straightforwardly attempting to create a new requirement.

(15) You should apologize

> (15a) ……but I actually don't care what you do, I'm only trying to look out for your best interest.

That point leads to another difference. Some directive acts, such as commands, express the will of the speaker. But others like advice don't necessarily do that. A use of (15) between friends could be felicitously followed by saying (15a), which denies that the speaker's will is involved. Even then, it would still be an attempt to guide action and a performative use of 'should'. Advice purports to direct, albeit without necessarily trying to get the speaker's wishes satisfied.

Speaker-endorsement is necessary for 'should' to be used performatively. Without such endorsement, one could use 'should' merely descriptively to convey information. For example, one could use (16) without trying to direct one's addressee to apologize. So, speaker-endorsement doesn't always amount to the expression of the speaker's will.

(16) According to the rules of etiquette, you should apologize

The foregoing details about performative and descriptive uses of deontic modals can help explain the potential oddity of the following sentences.

(17)? You must do it, but I am not requiring you to do it.
(18)? You ought to do it, but I am not recommending you to do it.
(19)? You should do it, but I am not advising you either way.

To my ear, these sentences sound rather odd, and anyone using them would need to explain exactly what they are trying to say and do because an addressee would be justifiably

confused otherwise. Nevertheless, I do think it is possible to hear these sentences without oddity, especially if they were adorned with qualifying phrases like 'according to the rules…'.

The potential oddity of (17) – (19) derives from the performative potential of the deontic modals occurring in them, which suggests an attempt to guide action in the very way that is subsequently denied. Yet it is possible for a speaker to clarify, implicitly or explicitly, that the source of the action-guiding directives is external, and that the speaker is not endorsing them. In such merely descriptive uses, appropriately signaled, those sentences would not be odd at all.

(17a) According to the rules, you must do it, but I am not requiring you to do it.
(18a) According to the rules, you ought to do it, but I am not recommending you to do it.
(19a) According to the rules, you should do it, but I am not advising you either way.

The main point of Section 2.3 has been to clearly distinguish the assertive and nonassertive uses of simple sentences in which deontic modals occur. This point has also brought up certain differences amongst deontic necessity modals like 'must' and 'should'. Section 3 will explore those differences in more detail and will suggest an argument that those words have nondescriptive meanings.

Section 3: The Different Ways of Expressing Deontic Necessity

Deontic necessity can be expressed in English in a variety of ways. In addition to the modal auxiliaries, there are several predicates that seem to convey very similar information.

(20) John *must* be in his office in ten minutes.

(21) John *ought to* be in his office in ten minutes.
(22) John *should* be in his office in ten minutes.

(23) John *has to* be in his office in ten minutes.
(24) John is *obligated* to be in his office in ten minutes.
(25) John *needs* to be in his office in ten minutes.
(26) The relevant rules, laws, and demands *require* that John be in his office in ten minutes.

It should be rather intuitive that the different words used in (20) – (26) have similar meanings. But they also have some differences, for which I have arranged these sentences into three groups. Their differences can arguably help show how some of these expressions have nondescriptive meanings.

The main point of section 3 will be to articulate the linguistic data that distinguishes these expressions for deontic necessity. A subsidiary goal will be to suggest that these distinctions are well explained by reference to the kinds of speech-acts they are characteristically used to perform.

Section 3.1: Deontic 'must' vs 'should'

Deontic 'must' is often used with a stronger degree of strength or urgency than 'should'. It is seen as more confrontational, more urgent, more demanding, more likely to require that someone with authority use it, more likely to express a speaker's will or wishes, and more likely to mark obligation.

Deontic 'should', on the other hand, is often used with a lesser degree of strength or urgency than 'must'. It is seen as more polite, more hypothetical, less demanding and more advising; it does not require authority even though intuitively it still tells someone what to do. Deontic 'should' is more likely to focus on the interest of the addressee and less likely to express a speaker's will or wishes (although it certainly isn't impossible to express wishes with

'should'). It is less likely to mark obligation, and more likely to express advice or recommendation.

These remarks can be illustrated by some examples. Deontic 'must' is stronger than 'should', in that it makes sense and is informative to say (27), but not (28). (28) seems to be redundant in some way, which conflicts with the indication from 'in fact' that one is adding extra detail.[5]

(27) You should do it and in fact you must
(28)# You must do it and in fact you should

Also, it would be quite odd to clarify a use of deontic 'must' by cautioning that one is only offering advice, while it is somewhat odd to clarify (as opposed to strengthening) a use of deontic 'should' by emphasizing that one is giving an order or command.

(29) You must do it
…and that's an order
#…and I'm only offering advice

(30) You should do it
?…and that's an order
…and I'm only offering advice

These differences between deontic 'should' and 'must' need to be explained, and they can be explained well by connecting them to different types of imperatival meanings – that is, to different speech-acts that imperatives are characteristically used to perform. When an imperative is used to advise, rather than command, it is understood as less strong, less urgent, less demanding, less confrontational, less likely to have to be issued by someone with authority, less likely to express the speaker's will or wishes, and more likely to focus on the interest of the addressee.

[5] This piece of linguistic data is also discussed by von Fintel and Iatridou 2008 and Sloman 1970.

Recall, from section 2.1, that imperatives can be used to command (31a), to request (31b), to advise (31c), and to permit/invite (31d). These uses can be distinguished by how they can be described post-performance.

(31a) *Finish your chores!* (#but you don't have to; #but I don't want you to, #but you shouldn't, #but you're not allowed to)
(31b) *Please, help me tidy up!* (but you don't have to; #but I don't want you to; #but you shouldn't; #but you're not allowed to)
(31c) *Wait until the price is right!* (but you don't have to; but I don't want you to; #but you shouldn't; #but you're not allowed to)
(31d) *Take as many as you like* (but you don't have to; but I don't want you to; but you shouldn't; #but you're not allowed to)

Deontic 'should' is suited to advise, and deontic 'must' is suited to command. That is the source of their differences. The act of advising is not necessarily an expression of a speaker's will; it is often tailored to help out the recipient and thus can be focused on the good of the advisee or some other interests which the advisee is aiming to satisfy. Commanding, on the other hand, is an attempt to exert a speaker's will.

There are other interesting differences between deontic 'should' and 'must' that can be explained in this way, too. Both words can be understood either epistemically or deontically. But while it can make sense to understand an occurrence of 'should' that takes a past-tensed complement as deontic 'should', it is very difficult, and sometimes impossible, to understand an occurrence of 'must' that takes a past-tensed complement as deontic 'must'.[6] For example, the dominant reading of the modal in (32) is epistemic, although (33) can easily be understood deontically.

(32) John must have apologized yesterday (epistemic reading dominant)
(33) John should have apologized yesterday (deontic and epistemic readings available)

[6] Ninan 2005 claims that deontic 'must' cannot take past-tensed complements.

One explanation for why deontic 'must' doesn't easily take past-tensed complements, is that it is suited for commanding. It doesn't make sense for a command to be directed at the past; we all know that we cannot change the past, no matter how strongly we will or desire it to change. But it does seem possible to use deontic 'must' with a past-tensed complement, *if* it is obvious that the speaker is not trying to direct action but instead is merely describing a fact.

(34) It doesn't matter to me if we follow the rules while playing this game. But, according to the rules of Monopoly, you must have paid a tax on your previous turn.

So, it is only the performative use of deontic 'must', and its propensity to be used that way, that stands in the way of it taking past tensed complements. The fact that it is so difficult to use 'must+ PAST' deontically, confirms the hypothesis that 'must' is suited for commanding.

The fact that 'should' is instead suited for advising can help explain why it can easily take past-tensed complements. Although advising itself is a future directed speech-act, its central feature is that it is directed at *what is best for the addressee to do*. Advice is sensitive to the goals and aims relevant to the advisee's decision. And it makes perfect sense to retroactively evaluate how well a set of goals were achieved, and what alternative means might have brought about better results. This is exactly what is conveyed by using deontic 'should' directed at past states of affairs. One cannot suggest to an advisee to change the past, but one can advise or recommend a set of goals and priorities which can evaluate past actions and their alternatives.

Finally, it has been claimed that there is yet another respect in which 'must' differs from 'should' that reflects a connection with imperatives. There is something infelicitous about claiming that an action *must* be done, as part of an attempt to influence behavior, and then denying that it *will* or *is going to* be done. For example, (35) and (36) seem infelicitous.

(35)? John must go to confession, but he won't.
(36)? You must go to confession, but you aren't going to.

Plausibly, such claims can be true. After all, requirements are sometimes violated. But it seems odd to actually say (35) and (36), if one is attempting to get the addressee to act. It is odd to attempt to get something done while denying that it will be done, and this plausibly explains the oddity of these sentences.

The pattern of infelicity involved with (35) and (36) leads Ninan 2005 to claim that deontic 'must' has "an imperative-like force", which is explained as "a practical feature" that involves "some sort of *speaker authority* or some attempt by the speaker to *initiate action*" (11, his emphases). Notice how an imperative like (37) can exhibit the same pattern of infelicity as 'must'.

(37)? Go to confession! But you won't.

It is interesting that this pattern of infelicity does not show up with deontic 'should' and 'ought to'. It seems perfectly fine to deny that what should happen, will happen. For this reason, Ninan claims that 'should' doesn't have imperative-like force.

(38) You should go to confession, but you won't.
(39) You ought to go to confession, but you won't.

Although I am amenable to Ninan's conclusion about deontic 'must', I have doubts about his argument for it, as well as doubts about his claim that 'should' lacks imperatival force. Notice that 'must' only exhibits the relevant infelicities when used performatively. In obviously descriptive uses, there is nothing odd.

(40) I am no Catholic, and I disagree with its requirements about confessing. According to its rules, John must go to confession, but he won't. And I fully support him in that.

It's only the performative use of 'must' that is infelicitous in the way that Ninan focuses on. Remember, too, that 'should' can be used performatively, but that such uses are not attempts to create obligation. Rather, they count as giving advice or recommendations, and especially as indicating what it is best for the addressee to do. Imperatives, too, are suited for giving advice and thus for pointing out the best ways for an addressee to act, e.g. (31c). When an imperative is obviously being used to give advice rather than command, it doesn't exhibit the infelicity that Ninan focuses on, e.g. (41).

(41) Now, you know I would never order you around, but as your friend I can still give you advice. Go to confession! But you won't, I'm sure.

The negative prediction only conflicts with the attempt to initiate action. Advice doesn't itself attempt to initiate action, but it is still a directive act because its purpose is to *guide* action. An account of advice will need to carefully explain this difference. Once the broader array of imperatival force is appreciated, we can see that the data involved with (36) and (38) do not support the claim that 'should' lacks imperatival force.

One might respond, on Ninan's behalf, that imperatives cannot be directed at the past. Purported examples of past-tensed imperatives in English all seem to be ungrammatical or else future-tensed. They cannot felicitously contain temporal adjectives that require the past-tense.

(42) Be sure to have signed all the documents (by Friday!; #yesterday!)
(43) #Have signed all the documents (yesterday)!

I agree that English imperatives cannot be genuinely past-tensed, and that a plausible explanation of that fact involves the imperative's future-looking directive function. But that is

compatible with saying that 'should' is conventionally connected with that core feature of advice-directives that is focused upon the interests of the advisee.

Interestingly, there *are* purported cases of rare past-tensed imperatives in certain languages, and they have been translated using deontic 'should' or 'ought to' as recommendations or wishes about past action.[7] So, perhaps other languages conventionalize imperatival functions that, in English, are expressed by 'should' or 'ought to'.

Everyone interested in normative semantics needs to explain the differences between 'should' and 'must'. It appears that the best explanation will involve their similarities with imperative sentences and the nonassertive speech-acts that imperatives are suited for performing.

Section 3.2: Deontic 'must' vs 'is required to', 'is obligated to', etc.

There are many expressions for deontic necessity that seem, more or less, to convey the same information. (These examples are reiterated from the beginning of section 3)

(20) John *must* be in his office in ten minutes.

(23) John *has to* be in his office in ten minutes.
(24) John is *obligated* to be in his office in ten minutes.
(25) John *needs* to be in his office in ten minutes.
(26) The relevant rules, laws, and demands *require* that John be in his office in ten minutes.

Any of these sentences could easily be used to communicate that it is necessary, deontically speaking, for John to be in his office in ten minutes. A plausible hypothesis is that they are suited for asserting the same, or at least very similar, information.

[7] The cross-linguistic survey of imperatives in Aikhenvald 2010 translates a past-tensed imperative from the language Tatar with English 'ought to', saying "In combination with a past tense verb, an imperative indicates that the action should have been completed prior to the moment of speech, and that the speaker regrets that it has not been completed (251)." Another example of what "appears to be a close approximation to a past tense imperative", from the language Syrian Arabic, is translated with English 'should': "The meaning is 'should have'" (132).

Still, there are some interesting differences. As I explained in section 3.1, English deontic 'must' cannot take a past-tensed complement unless it is obviously being used merely to describe rather than to perform a nonassertive act. It also does not itself inflect for past-tense. But the other expressions for deontic necessity can interact with past-tense morphology in both of those ways, and rather easily. They can report on a present necessity about a past action, and they can also report on a past necessity about an action that could be past, present, or future.

(44a) John has to have paid his debts.[8]
(44b) John had to pay his debts.

(45a) John is obligated to have paid his debts.
(45b) John was obligated to pay his debts.

(46a) John needs to have paid his debts.
(46b) John needed to pay his debts.

(47a) The rules require that John already have paid his debts.
(47b) The rules required that John pay his debts.

These other expressions for deontic necessity are better suited than 'must' to report on obligations involving the past. They also, I submit, seem more likely to externalize the source of the obligation, as opposed to being used to create an obligation (recalling the notions introduced in section 2.3). That is, they are less suited than 'must' is for performing the nonassertive act of creating an obligation, e.g. by commanding an addressee to do something.

Nevertheless, it is certainly possible to use (23) – (26) performatively, to create an obligation for John to be in his office in ten minutes or to report on rules which one endorses and which require him to do so. An explanation of the connection between deontic necessity and performativity needs to account for the fact that any expression of deontic necessity can be used

8 This sentence stands out because its most salient reading is epistemic. Still, there is a deontic reading available on which it is now the case that John has an obligation to have paid his debts at some time in the past.

performatively, although certain expressions like ‘must’ seem more suited for performative uses as is reflected in its restrictive occurrences with the past tense.

In section 3, I have distinguished three categories of expressions for deontic necessity in terms of their interaction with the past tense as well as their suitability for performing particular types of nonassertive speech-acts. Anyone interested in normative semantics should explain these differences, and I offered linguistic data suggesting that good explanations will connect these expressions with the kinds of speech-acts that imperative sentences are used to perform.

I now turn to arguments that more directly indicate connections between imperative sentences and normative sentences. The intended conclusion in each of section 4 – 7 is that the connection is *conventional*, and thus that normative semantics and imperative semantics are intertwined. In each section, I briefly characterize the argument before turning to complications, all of which constitute linguistic data needing explanation; the explanations will be provided in chapter two.

Section 4: The Argument from Semantic Conflict

Despite the fact that imperative sentences cannot be called true or false, they can be inconsistent with each other. It would be absurd for someone to address you with the following imperative sentence. That would give you inconsistent directions. It would be impossible for you to comply with everything you’ve been directed to do.

(48)# Do it, but don’t do it!

This notion of inconsistency can also apply to sentences that mix normative claims with imperatives. The most plausible examples involve uses of deontic 'must' that report on an urgent or overriding obligation.

(49)# You must go to confession, but don't do it!
(50)# Go to confession! But you mustn't do that.

If these sentences are inconsistent in the same way, then they too offer inconsistent directions. And indeed, the oddity of these sentences does seem to derive from the fact that they direct one to do something and then also direct one *not* to do it. So, the normative clause seems to contribute a directive in the way that imperative clauses do. And it is the occurrence of deontic 'must' that makes the clause directive, as can be seen by substituting it with other, non-normative terms.

Deontic 'may' can also conflict with an imperative. This is not a case of directing an addressee to do something and then directing him or her not to do it; instead it permits one to do something that was forbidden by an imperative.

(51)# Don't do it! But you may do it.

Notice that it is not merely an *utterance* of sentences like (48) – (51) that would be absurd. The *sentences* themselves seem contradictory. This suggests that the standing meaning of 'must' and 'may' includes an imperative-like function of directing or permitting.

That's the basis of the argument from semantic conflict. But there remain some important complications.

Even if deontic-'must' contributes an imperative-like directive, there are undeniable differences between deontic-'must' sentences and imperatives. For example, it seems possible to use deontic 'must' merely descriptively, without endorsing the requirements one is reporting on.

(52) I am no Catholic, and I disagree with Catholic requirements about confessing. According to Catholic rules, you must go to confession. But don't do it!

Interestingly, this descriptive use of 'must' implicitly recognizes that the requirements offered by rules are restrictions on action. It uses an imperative to *disagree* with them. So, even though this use of 'must' is not one that is *inconsistent* with the subsequent imperative (the sentence isn't *absurd*), it implicitly recognizes that what deontic 'must' reports on is something that can come into *conflict* with imperatives.

The extra qualifications present in (52) are important, in order to hedge the implicitly recognized conflict and thus to demonstrate that the speaker isn't absurdly restricting action in inconsistent ways. Without those qualifications, the sentence could be justifiably understood as contradictory, like (49). However, the explicit hedges might sometimes be left implicit, e.g. if they are obviously understood by all parties to the conversation. So, it should be admitted that even (49) could be used without absurdity to direct someone to violate a requirement that is either overridden or is not endorsed at all.

A sentence like (52) shows how deontic 'must' can be qualified and hedged in ways that imperatives cannot be. Although we might be able to make sense of someone saying (53), the sentence isn't really well-formed:

(53) (I am no Catholic, and I disagree with Catholic requirements about confessing.) #According to Catholic rules, go to confession. But don't do it!

Another difference between deontic modals and imperatives is that one can use deontic 'must' to report on *conflicting obligations*, although it doesn't make sense to use imperatives to do so. (54) is not absurd, although it does recognize a conflict. So, the two occurrences of 'must' in (54) are not contributing incompatible directions; at least one of the deontic clauses is merely assertive. (55), however, doesn't make sense.

(54) You must keep your promise. But, considering all the circumstances, what you (really) must do is to break the promise and save the drowning child.

(55) #Keep your promise! But, considering all the circumstances, break the promise and save the drowning child!

The differences highlighted in (52) – (55) show that deontic 'must' clauses are descriptive in a way that imperative clauses are not. These differences need to be explained, and it also needs to be explained how an inconsistent sentence like (49) might nevertheless be used coherently.

However, even if deontic 'must' clauses are descriptive in the fullest sense, that doesn't prevent them from having something in common with imperatives. It might be that a simple deontic 'must' clause is conventionally directive, like an imperative, even though it is *also* conventionally assertive. The argument from semantic conflict gives reason to think that deontic 'must' *is* conventionally directive; simple clauses with deontic 'must' can be inconsistent with imperatives. But the assertive nature of such clauses also allows them to be used merely descriptively, and to be hedged and qualified in ways that contain the conflict. This suggestion raises several kinds of questions: How could a clause semantically contribute a directive, even if it can be used literally without performing a directive speech-act? Is the clause ambiguous? Or perhaps it merely conversationally implicates a directive?

Another group of complications involves the fact that there are other types of declarative sentences which, when mixed with imperatives, produces oddity.

As shown in section 3, there is something odd about directing someone to do something and then asserting that he *will not* do it, e.g. in (56). It's odd to say such things in the opposite order, too. Furthermore, the sentences used to say such things themselves seem odd. So, by the kind of reasoning just presented in the argument from semantic conflict, does it follow that 'will' has an imperative-like function of offering a directive?

(56)? Go to confession! But you won't.
(57)? You will not go to confession. But do it!

I don't think such reasoning applies here to 'will'. The oddity with 'will' isn't the same as it is with 'must'. The *truth* of the 'will'-sentences in these examples isn't put in doubt by the imperatives; it's simply odd to say them. Also, notice that the same kind of oddity that arises with (56) and (57) also arises with the negated forms of their imperatives. And it seems that that kind of oddity also arises with a straightforward affirmation that one will do something, followed by an imperative to do it.[9]

(56-neg-imp)? Don't go to confession! And you won't.
(57-neg-imp)? You will not go to confession. And don't go!

(58)? You will go to confession. And go to confession!

These facts suggest that an imperative *presupposes*, in some way, that it is not yet settled whether the directive it offers will be carried out. Or, at least, it is presupposed that issuing the imperative might have a chance at succeeding in getting done what it asks to be done.

[9] It's important that the 'will'-sentences in these examples are merely assertive claims about the future. Of course, it is possible to add focal stress to such occurrences of 'will', and thus to use the sentences to direct or even command, as if issuing an imperative. But that presents a very different comparison than the one I am focusing on in the text.

The relationship between imperatives and their corresponding 'must'-claims is not presupposition. The kind of oddity that arises with (59) simply doesn't arise when its imperative is negated. (59) is incoherent. But the rest of (60) – (62) are coherent; if there's something odd about them, it is not inconsistency and it is not presuppositional. (I'll return to consider their potential oddity in the next section.)

(59)# Go to confession! But you mustn't do that.
(60) Don't go to confession! You mustn't do that.
(61) Go to confession! You must do that.
(62) You must go to confession. Do it!

An additional point distinguishes 'must' and will'. If one uses the imperative in (59) to create an obligation for the addressee to go to confession, then it becomes true that the addressee *must* go to confession, in the sense of 'must' that reports on obligations. A use of an imperative can immediately affect the truth-value of information involving deontic necessity. However, it cannot affect the truth-value of what *will* happen in the future, unless it helps to bring it about *causally*. The conflict between imperatives and deontic 'must' is *semantic* in a way that it isn't with predictive 'will'.

Section 5: The Argument from Redundancy and Reinforcement

There is a line of reasoning closely related to that of the argument from semantic conflict that I've just been discussing. It notices that there can be something redundant, or perhaps reinforcing, about combining imperatives and deontic-'must'.

One can sensibly repeat a directive, e.g. in order to stress urgency or importance. This can have a reinforcing effect. But doing so is redundant, in the sense that it doesn't add a new

directive or assertion or any other new conversational move; it just reiterates a move already made. It would be odd to use phrases that indicate a new claim is being made.

(63) Go to confession! Do it! (#And furthermore, do it!)

It seems that there is something similarly redundant about adding an imperative to a simple deontic 'must' sentence, at least when 'must' reports on an overriding obligation. That can have a reinforcing effect, but it nevertheless is redundant in the relevant sense.

(64) You must go to confession. Do it! (#And furthermore, do it!)

The issue of adding deontic 'must' to an imperative is a little more complicated. For example, one can cite an obligation in order to provide a reason for why one is offering a directive. Or one can cite rules that add further information about the restriction on action.

(65) Go to confession! You must do it (according to the rules)

So, it is not totally redundant to add a sentence with deontic 'must' to an imperative. That could be explained by the fact that the sentence with deontic 'must' is assertive and reports information that isn't associated with the imperative sentence.

Nevertheless, there does seem to be a sense in which redundancy is involved, even in (65). The directive offered by the imperative is repeated by using the subsequent sentence with deontic 'must'. Clearly, if one is using 'must' performatively, then there would be some redundancy; that would count as two attempts to create the same obligation. And if the sentence with deontic 'must' is unadorned by hedges and qualifications, then it seems plausible that the sentence *is* redundant in that respect, even if it does add more information.

Section 6: The Argument from Denial

Philosophers and linguists sometimes use considerations of deniability in order to figure out the propositional content, truth-conditions, or assertive content, of a sentence or utterance.[10] Earlier, in section 1.2, I used this argumentative route to show that 'must' makes a meaningful contribution to informational content.

Although it's not often recognized, we can also deny non-assertive speech-acts. Although one cannot respond to an imperative utterance with 'That's not true', one *can* respond by saying 'No'. We dissent from and assent to both assertions and non-assertions. One can reject the move in the language game that was made by using the imperative, and this isn't rejecting an assertion or a truth-apt sentence. Figuring out what such denials mean might illuminate the meaning of the non-assertive act or sentence.

Imagine that John addresses you by saying, 'Sit down!', which you both recognize as a command, and that you reply, 'No.' What does your response mean? What exactly are you denying? Certainly, you are rejecting the demand that John tried to put upon you. So, it seems that you are negating the need or necessity for you to sit down. You are allowing yourself to ignore that demand, and thus effectively you are permitting yourself to disobey or not comply with it. This is confirmed by the possible ways of filling out your response.[11]

(66) No, I don't have to do that
(67) No, I'm allowed to do otherwise

[10] Some examples: Simons 2007, MacFarlane 2011, Papafragou 2000 and 2006, and Faller forthcoming.
[11] These seem to be *direct* responses, which merely illuminate what is being denied without adding information about why one is denying rather than accepting. Other, indirect types of responses include. 'No, I can't do it' and 'No, I've been ordered to stay put'.

So, it seems that denying a command can mean the very same thing as denying a deontic utterance. Denying a command is, at least implicitly, a permission to not comply with it. It is denying the need or (deontic) necessity that the command attempted to create. Such denials can be clarified using deontic modals, which suggests that the meanings of the modals and the imperative overlap.

That's the argument from denial. But perhaps the reasoning went too quickly. After all, there are other ways of filling out a denial of a command, e.g. (68) is a natural way to disagree.

(68) No, I won't do that.

One might be tempted to infer from this fact that the imperative simply means that an addressee will do it. But that runs into the problem of explaining what is different between using (68) to deny a mere report and using it to deny an imperative. If someone were to give you her *prediction* by telling you that you will stop smoking, and you deny it, then you say it isn't true and you might justify your denial with inductive evidence of your inability to do so. But if she were to *enjoin* you by telling you to stop smoking, your denial would mean something very different. Inductive evidence is irrelevant to the latter type of disagreement.

This points out how 'I will' can be used for two different purposes: to predict or report on the future, and to express a speaker's will or intention. If (68) is uttered in response to a command to sit down, it should be interpreted in the second way, as expressing the speaker's intention to disobey.

Thus, it appears that there are two ways of disagreeing with a command. Which, if any, helps to reveal the meaning of the imperative used to command? Perhaps each does. But the difference between them needs to be articulated better, and this is facilitated by considering a

case in which there are two commanders who can disagree with each other about what a third party is to do.

(69) Commander 1: Jones, swab the deck!

Commander 2, reply A: No, Jones, don't swab the deck!
Commander 2, reply B: No, Jones doesn't have to swab the deck.
Commander 2, reply C: No, Jones won't swab the deck.

Note first that reply C is a bit odd because it doesn't really disagree with the original command, to which it replies with 'No…', which indicates disagreement. The only way to interpret 'will' in this third personal context is as a prediction or report about the future, which at best might indirectly disagree with a command by disagreeing with a presupposition that the command has some chance of being fulfilled.

Reply A disagrees with the original command by issuing the contradictory command; this is a case in which Commander 2 expresses her will that Jones disobey the original command. That goes further than reply B, which only rejects the requirement that was proffered by the original command; it doesn't offer any additional command like reply A does and it doesn't express Commander 2's will.

If one only wants to disagree with the command, rather than also expressing one's will or intentions, reply B is the best choice. It's equivalent to denying the normative necessity. If one wants to go further and contradict the original command/expression of will with a contradictory command/expression of will, then reply A would be the best choice. A theoretical explanation of how disagreement applies to nonassertive speech-acts like commands should offer a deeper account of this distinction.

We can also accept or assent to an utterance of an imperative, typically by saying ‘OK’ or something equivalent. This might be less revealing for the case of imperatives than it is for assertions, because affirmative responses to imperatives are less often filled out in a way that reveals what is being accepted. Plausibly, such acceptances signal that one will try to fulfill what was asked or commanded, or that one accepts it as a commitment, and, again, these responses are importantly different from signaling a mere prediction that one will so act. Responding with a mere prediction will not assure the commander of your intention to act.

Of course, imperatives are not always used to command. They are often used to merely request, or to provide advice. Denying such uses are interestingly different from denying commands.

Suppose that John requests you to bring him a glass of water by saying ‘Please bring me a glass of water’, and that you respond by saying ‘No’. In this case, it doesn’t make sense to fill out your response by saying ‘No, I don’t have to’; such a response invites the retort ‘I know you don’t have to, I was merely requesting.’ A request seems to allow for refusal, which makes sense given that requests are usually signaled with politeness markers such as ‘…if you please’.

Deontic necessity modals aren’t used to merely request, though they are sometimes used for more stringent directive acts such as commanding or advising. So, it makes sense that one wouldn’t deny a deontic necessity claim in order to reject a request.

Suppose now that you implore John for advice about a delicate matter and he advises you to consult a doctor by saying ‘Go see a doctor!’. I think it is less usual to reject advice than it is to reject other directive acts. But it seems possible. You might directly reject John’s advice by saying:

(70a) No, that wouldn’t do any good
(70b) No, that wouldn’t help fulfill any of my aims

These responses appear to reject John's advice on the grounds that it isn't helpful. It isn't providing the help that was asked for.

Interestingly, it does make sense to fill out acceptance of advice, and doing so can involve deontic modals.

(71) Yes, I should go see a doctor

Section 7: The Argument from Questions and Answers

The relationship between questions and their direct answers is very important for semantics. One doesn't understand a question unless one understands what qualifies as a direct answer to it. Their meanings are connected with each other in a very close way.

The paradigmatic instance of a question is a request for information, something that can be answered by asserting the information that was requested. Some questions, however, request more than information; they request an addressee to do something more than merely assert the requested answer. A good example is that sometimes one asks a question in order to ask for advice. Another example is that one can ask for permission.

Imagine that a friend asks you for advice about an important decision she has to make soon. You can directly answer her question, and satisfy her request for advice, by using an imperative.

(72-Q) Should I go to confession?
(72-A1) No, don't go to confession.
(72-A2) Yes, go to confession.

Responding with an imperative fulfills exactly what was asked for by the questioner. This suggests yet another way that the meanings of deontic modals and imperatives are connected: deontic questions ask for imperatival answers.

Of course, one can also directly answer the question by using deontic 'should'. And sometimes a 'Should I…?'-question merely requests information. But when the question is a request for advice, a merely descriptive use of 'should' is not a sufficient response. If you were to reply in a way that suggests that you are using 'should' merely descriptively, it would make sense for your friend to repeat her question, putting focal stress on the word 'should' to indicate that you haven't fulfilled her request.

(72-Q) Should I go to confession?
(72-A3) According to Catholic rules, you should go to confession.
(72-Q`) That's fine. But what *should* I do?

She wants you to provide advice, not merely to tell her what some external source of rules has to say on the matter. Her request won't be satisfied until you give her advice. Of course, a straightforward way of doing this is to use deontic 'should' with endorsement. This provides the kind of direction that she asked for.

Another example of asking a question that does something other than ask for information involves deontic-'may'. One can use it to ask for permission. Such questions can be answered by imperatives that either permit or forbid. An affirmative imperative answer cannot be interpreted as more than granting permission unless it goes beyond answering the question.

(73-Q) May I go now?
(73-A1) Yes, go ahead.
(73-A2) No, don't go.

The affirmative answer (73-A1) grants permission, as requested in (73-Q). The negative answer (73-A2) denies permission and effectively commands the questioner to refrain from going, which confirms the claims made earlier in the argument from denial that commanding and permitting bear a relationship of refusal to each other.

The interrogative sentence (73-Q) can also be used merely to ask for information, in which case it asks about what is permitted rather than asking for permission to be granted.

Normative questions that ask for something other than information raise a few interesting complications. First, there seem to be two ways of requesting advice which are distinguished by what counts as a "correct" answer. On the first way, an agent asks an addressee for help in figuring out which option is *the best the agent can do*, or which option would best satisfy whichever interests are relevant for the agent's decision. When there is a fact about which option is best, then there is a uniquely correct answer to the question. This first way of requesting advice implicitly assumes that the speaker has certain goals (not necessarily self-interested ones), and asks about how to fulfill them. So, I will call this the "goal-relative" request for advice. It can have a uniquely correct answer.

But another way of requesting advice makes no specific assumptions about which goals or interests are relevant to the decision, and so different respondents might produce incompatible responses although each is "correctly" responding by providing his or her advice. I will call this the "goal-open" request for advice, since it is left up to the advisor which goals are relevant for figuring out what to do. This type of question can appropriately be responded to in such a way that the advisor, perhaps implicitly, advises the one requesting advice to have goals that she in fact doesn't have. A goal-open request for advice can be correctly answered in incompatible ways. Or, perhaps the notion of correct answer simply doesn't apply.

In either case, one must be careful to distinguish a request for advice from the request for an addressee to provide information about his own state of mind. Typically, the questions 'What should I do?' and 'What do you think I should do?' are heard in the same way as requests for advice. But the distinction matters semantically. The difference is subtle because responses to questions are expected to be based upon what the respondent thinks is the correct answer. Even when it is left up to the respondent to choose which goals to base his advice on, there remains that subtle difference between the request to advise and the request to report information about his own state of mind. The same distinction applies to normal information questions: if I ask you what time it is, I expect you to respond by telling me what you think the time is. You might accurately report what you think the time is, while mistakenly giving me an incorrect answer about what time it actually is.

A second complication about normative questions involves 'must'. We hardly ever ask questions with deontic 'must' with the purpose of requesting obligation. This makes sense on the assumption that there is no benefit in actively pursuing an externally imposed restriction on one's own freedom to act. There is nothing incoherent about a request for a new obligation, or about a 'must'-interrogative being used to make such a request, and so we should be able to make sense of such a question semantically. But it has little currency or utility in ordinary language, and so we shouldn't expect for such a question to be asked in ordinary conversations.

We do, however, use 'must' in questions to request information, when we are unsure about what requirements or obligations apply to the situation at hand. This doesn't conflict with the point emphasized at the beginning of this section, that deontic questions request imperatival answers, if deontic modals are treated as informative as well as performative. The interesting

phenomena that this section began with are not best demonstrated with ‘must’, but rather with ‘should’ and ‘may’.

Section 8: The Argument from Translation

Section 8.1: The basis for the argument

A perfectly accurate translation of one word or sentence into another language would seem to require a relation of synonymy between the translation and the translated. In actual practice, perfect synonymy is quite hard to find. Nevertheless we are able to translate, sometimes rather roughly, between different languages. A good translation will exchange words and sentences that at least have some core meaning in common, even if there are specific details that distinguish them.

Looking at other languages might help us learn about our own language. One might wonder how and why a word in a foreign language comes to be translated using English deontic modals. What is it about a foreign expression that makes it have the meaning of a deontic modal as opposed to something else? Is it merely what it properly applies to, or could there be some other criterion such as how it is distinctively used?

For example, translators will assign the meaning of English ‘red’, or ‘round’, to a foreign word only if that word is standardly applied to red, or round, things. But there are linguistic constructions that get classified according to their prototypical usage: the paradigm examples are sentence-moods such as imperatives.

Linguistic researchers who study natural languages employ a notion of “usability” to identify a syntactic string of marks or noises as a specific clause-type or sentence-mood, e.g.

imperative, declarative, or interrogative.[12] A sentence-form is identified as an imperative because it is suitable for being used to direct. This practice implies that the conventional meaning of the imperative sentence-form involves this suitability to direct.

We might learn something about what makes a normative word normative, by looking at how translators and linguistic researchers understand their essential features. If normative words like 'must', 'should', and 'ought' are merely descriptive, then we would expect them to be translated into other languages in the way that 'red' and 'round' are, i.e. based only on what they properly apply to. However, another possibility is that normative words are translated into other languages based on how they are used, in the way that imperatives are identified in other languages. If that were the case, we would have some reason to think that the type of meaning had by distinctively normative language involves the kind of suitability-for-use that is involved in the meaning of clause-types like the imperative.

We might look at how prescriptive sentences in other languages, such as imperatives, are translated into English. If our best translations and grammar books make use of English deontic modals like 'should' to help translate foreign imperatives, which are obviously prescriptive, then that would suggest that 'should' itself has prescriptive meaning.

The premise of this reasoning is that the practice of empirical linguistic research, and in particular their practice of translating between languages, can illuminate the meanings of English normative vocabulary. Accordingly, I will now report and discuss some examples. Although the details are fascinating, I will only try to draw general, tentative conclusions, given the delicate nature of talking about languages that neither I nor my readers can be expected to understand.

[12] See Konig and Siemund 2007 and Saddock and Zwicky 1985.

Section 8.2: The linguistic data

It has long been suspected that the linguistic expression of modality is intertwined with that of mood. And in particular, deontic modality is often linked with the imperative mood.

This is reflected in recent cross-linguistic research that draws upon grammars and translation manuals. Konig and Siemund 2007's investigation of clause-types says that imperatives are "constructions expressing directive speech acts" which can be divided up into "sub-categories of imperatives" that are associated with particular types of directive illocutionary force. One such sub-category contains "debitives" that are associated with the force of obligation and are translated with English 'must' (313-6).

Palmer 2001's investigation into mood and modality classifies obligation markers and permission markers as directive language, along with imperatives and a mix of other types of sentences. Normative and directive discourse functions can be had by a variety of types of language. For example, Palmer says that subjunctive clauses in Romance languages are said to express directive notions like those expressed in English by deontic 'should' and the imperative.[13] He cites examples in Italian and Latin that use a subjunctive to mark weak obligation.

Some languages syntactically mark different types of imperatives. For example, a prohibitive (roughly, a negative imperative) might receive special markings for negation or particles that mark "irrealis" and "mood markers". Palmer reports translations of Nakanai prohibitives that use deontic 'must' to help translate the irrealis marker 'ge'.[14]

[13] Palmer 2001, p. 127
[14] Palmer 2001, p. 182.

(74) umala kokue-a
Don't hit-3sg
'Don't hit him'

(75) eme umala ge kokue-a
2sg don't IRR hit-3sg
'You must not hit him'

Aikhenvald 2010's study of imperatives across natural languages continues this trend of both associating deontic modality with the imperatival function of directing and also using English deontic modals to help translate foreign imperatives. At one point she states rather summarily, "Imperatives typically do not co-occur with markers of deontic modalities involving obligation – since obligation is part of the imperative meaning itself" (142). Even though these two types of language don't typically "co-occur", expressions of obligation turn out to be helpful in translating imperatives because they might help convey more specifically a variety of imperatival meaning.

For example, in the language Chemeheuvi, a verb with a past tense marker is ambiguous between meaning a statement about the past or instead meaning "a command." (Note: Aikhenvald sometimes uses 'command' broadly to mean a generic directive speech act). The sentence used to exemplify the point, which is not an imperative but is assigned the directive meaning of an imperative, is translated with deontic 'must': 'You went and visited' or 'You must go and visit' (269).

In the language Kobon, "obligation is expressed through a special set of verb forms (different from a normal imperative), termed 'prescriptive mood':

"8.37 Kale nagi li-min
2p vine put-PRESCRIPTIVE
'You should tie it with vine'" (273).

In that example, deontic ‘should’ is used to translate the verbal mood indicating prescription, which is claimed to express obligation. Aikhenvald also provides examples in which deontic ‘must’ is used to translate declarative sentences with directive meanings in the languages Northern Subanen, Tuvaluan, and Cairene Egyptian Colloquial Arabic.[15]

In the language Tsakhur, adding an irrealis marker to an imperative produces the meaning of “wish, advice, or a recommendation with respect to the past, rather than just a command” and is translated using deontic ‘should’ and ‘ought to’:

“Tsakhur (Dobrushina 1999: 266)
4.46 Ali=w=s-i sa dawar
3=buy=IMP-IRR one lamb
‘You should buy a lamb’ or ‘You ought to have bought a lamb (in the past)’” (143-4).

Finally, Aikhenvald reports how deontic modals are used in the following two examples to translate imperatives that, perhaps, are not being used to direct action but instead to convey information about obligation or value:

“In Turkic languages, imperative forms can convey the meaning of necessity and obligation. This typically involves a series of unwelcome and hard-to-perform actions:

“Tatar (Nasilov et al. 2001: 217)
7.47 Esla da, uky da, bala da uster
Work.IMPV PARTICLE study.IMPV PARTICLE child PARTICLE raise:IMPV
‘You [have to] work, and study and raise kids [all at the same time]’

“In combination with a past tense verb, an imperative indicates that the action should have been completed prior to the moment of speech, and that the speaker regrets that it has not been completed:

“7.48 Jas cak-ta uky i-kan…
young time-LOC study.IMPR.2pl be-PAST.PART
‘It appears that one ought to have studied when young’” (251).

[15] Aikhenvald 2010, p. 273-4.

This final set of examples might not support the same conclusion that I am using the other examples to argue for: that the conventional meaning of deontic modals includes the directive function of imperatives. But it does provide more evidence of the conventional connection between deontic modality and imperative meanings. When an imperative cannot be used to direct, e.g. because it is a rare past-tensed imperative, it receives an interpretation of deontic modality.

As I cautioned before, I think it is unwise to try to draw specific conclusions from linguistic data about languages that neither I nor my readers can be expected to fully understand. But I do think we can draw some conclusions about how linguistic researchers themselves use English deontic modals to talk about such data. Such researchers commonly appeal to *directive meanings* to explain the meaning of imperatives, i.e. meanings having to do with their being used to perform directive speech-acts. Furthermore, they treat English deontic modals as directives, sometimes explicitly, and they use them to translate foreign sentences with directive meanings:

(76) (a) English deontic modals are often classified as directive language, sometimes explicitly
(b) English deontic modals are used to translate foreign imperatives that are marked for a more specific usage (e.g. a "weak" directive, such as advice, or instead to strengthen a command) than the more general usage indicated by the imperative simpliciter
(c) English deontic modals are used to translate foreign sentences that have directive meaning but which are syntactically distinguished from imperatives (e.g. as prescriptive or prohibitive moods)
(d) English deontic modals are used to translate foreign declarative sentences that are assigned directive meanings

These practices of linguistic researchers imply that deontic modals have a directive function. Furthermore, it is strongly suggested that such functions are not merely pragmatic, or dependent upon particular features of a context of utterance. These examples come from grammars and translation manuals: these sources, if any, should help explain the conventional

meanings of a language. But, of course, it is not always clear if a translation is perfectly accurate, or if it is implicitly appealing to specific ways of using an expression. My conclusion here is meant to be somewhat tentative, and to focus on how the linguistic researchers themselves are understanding the relevant expressions.

Nothing in the examples I've discussed in this section, nor in the conclusions I have tried to draw, denies that an English sentence like 'You should buy a goat' is descriptive, i.e. suited to convey information. In fact, I don't wish to deny that we can identify deontic modal meanings in other languages partly based on what they apply to: a modal isn't deontic if it isn't about obligations, duties, requirements, permissions, or values. It seems that, somehow or other, normative language is both performative and descriptive. This rather elusive conclusion can be sharpened, and I will try to do so in chapter two when I give a detailed account of imperative meanings and how normative meanings relate to them.

Conclusion

The aim of chapter one has been to illuminate the debate between descriptivism and nondescriptivism about normative language. I began with considerations in favor of the positive claim of descriptivism, that normative language has descriptive meaning. The thrust of the rest of the paper went towards the positive claim of nondescriptivism, that normative language has nondescriptive meaning. The argumentative route to this conclusion was to look at how deontic modals like 'must' and 'should' are connected with imperatives: they can stand in distinctively semantic relations towards each other regarding inconsistency, deniability, questions and

answers, and translation. These arguments and the linguistic phenomena that they focus on should be explained by an adequate theory of semantics and pragmatics.

The next chapter will attempt to construct a nondescriptivist semantic theory to explain the arguments from sections 4 through 7.

Chapter Two

A Speech-Act Semantics for Normative Sentences

In chapter one, I examined several pieces of linguistic data involving normative language and their apparent connection with imperative sentences. The purpose of this chapter is to explain those phenomena, and thereby to begin constructing a semantic framework in which normative sentences are directive declaratives.

I will only be concerned with simple sentences in this chapter. Complex sentences, and the compositional framework needed to interpret them, will be addressed in chapter three.

This chapter has two parts. In part I, I sketch the theory, in order to explain the data from chapter one. More and more details will be added as this chapter proceeds. Part II will then fill out the theory I am proposing by comparing it with theories developed by, both because I from their work and also because my development of those ideas diverges from how they had intended for them to be developed.

Sections 1 – 3 of this chapter sketch the semantic framework I am proposing. It borrows some fundamental ideas from theories of language and conversation from David Lewis (Lewis 1979a,b) and Robert Stalnaker (Stalnaker 1978, 2002), in order to develop a "scorekeeping" account of assertion and command. The proposed theory is a version of dynamic semantics because it identifies the meaning of a sentence with the characteristic change in context associated with that sentence. Declaratives have assertive meanings, imperatives have directive meanings, and declarative sentences with deontic modals are both assertive and directive.

Sections 4 – 7 explain the linguistic data from chapter one. Section 6 provides details about the assertive contents of normative sentences. Section 7 provides details about 'should',

advice, and interrogative sentences, in order to address the argument from questions and answers from chapter one.

In section 8, I further develop the theory by contrasting it with Stalnaker's account of assertion. In section 9, I contrast it with Lewis' account of permission and also offer a response to his "problem about permission".

Section 1: Imperatives and Declaratives

The difference between imperative and declarative sentences is easy to summarize: Imperatives tell an addressee what to do, whereas declaratives tell an addressee what is the case. That's my short way of putting their essential difference in meaning. When I'm more careful, I say that their conventional meanings suit them for different ways of changing a conversational context, and thus that they are suited for being used to perform different types of generic speech-acts. Imperatives are characteristically used to direct action, whereas declaratives are characteristically used to convey information.

More particularly, one can distinguish their crucial difference by focusing on a pair of sentences that are as similar as possible.

(1) John, be here in ten minutes!
(2) John will be here in ten minutes.

These sentences have the same *content*, since they share a common topic; they are about the same information: John's being here in ten minutes. Yet they differ in *force*, because the mood by which one presents its associated information shows that it *is to be made true* whereas the mood by which the other presents the same information shows that it *is the case*. One is

suited for a characteristic use *to get John to behave* in a certain way. The other is suited for a characteristic use *to predict* or *report* that John will act that way. The force of an imperative grounds its characteristic action-guiding use, while the force of a declarative grounds its characteristic information-exchanging use.

The shared content of (1) and (2) is the proposition that John will be here in ten minutes. Although there are drastically different ways of understanding what propositions are, I don't need to wade far into such issues. In my theory, there are pieces of information, which can be true or false, and which can be semantically associated with sentences. I call upon propositions to play this role, and later I will have cause to conceive of a proposition as a set of possible worlds, following Lewis and Stalnaker. For convenience, I assume that I can refer to propositions with 'that'-clauses without worrying about how tense and indexicals help determine the propositions I indicate.

My focus will instead be on the notion of force. More particularly, I will examine the force of a *sentence* rather than the force of an *utterance*. An utterance is a particular use of a sentence, in a particular context. A single utterance can perform one or more speech-acts with specific types of illocutionary force (e.g. warning, threat, invitation, etc.). Utterance-force is pragmatic, because it can be determined by particular features of a speech situation. On the other hand, the force of a sentence corresponds to very general types of usage: (2) is suited for the generic purpose of conveying information, and (1) is suited for the generic purpose of directing action, and either of those purposes could be achieved in a variety of specific ways. Sentence-force is semantic; a speaker who didn't understand how the different moods of (1) and (2) affect how they are to be used would not fully understand what they mean.

There isn't an infallible determination of utterance-force by sentence-force. It is possible to use a sentence, in a particular context, to perform speech-acts with wide varieties of illocutionary force. For example, it is possible to use a declarative to command; in an appropriate context, one could put focal stress on 'will' while using (2) to do this. Intonation is usually an important factor, and there are numerous other means by which a speaker can use a sentence, with its standing meaning, in a particular context to perform one of a wide variety of speech-acts.

Nevertheless, the meaning of a sentence constrains the many ways of using and understanding its particular uses in context, and sentences can be characteristically suited for a general type of use without regard to a particular context of utterance. Sentence-force is the semantic contribution of the sentence-moods.[16]

Section 2: Speech-Acts and Conversational Score

So, what is sentence-force? My answer appeals to generic speech-acts which I identify with the distinctive changes in context brought about by their successful performance. A sentence's force suits it to be used in conversation in certain ways. (2) is suited for the generic speech-act of *asserting*. (1) is suited for the generic speech-act of *directing*.

An assertion is an attempt to share information with other conversants, and it is successful if it has this "essential effect" (Stalnaker 1978). An assertion that p can be successful even if the other conversants don't come to believe that p. The essential effect of assertion is to put its information on the conversational record. Any conversant who witnesses the attempt to

[16] The notion of sentential force is given some elucidation by Chierchia and McConnell-Ginet 1990, p. 163-170, and Portner 2009, p. 262. The original idea goes back to Frege's work on the foundations of modern logic. I will comment more on Frege's idea of force in chapter three section 1.

do so without objecting thereby allows for the attempt to succeed. In my terminology, she *acknowledges* that p. An assertion's attempt to share the information that p is successful just in case it is acknowledged that p.[17]

Likewise, directive acts have essential effects. A command, for instance, is an attempt to initiate, or prevent, a certain course of action (Lewis 1979b). Its success does not depend on that action being performed; it is one thing to succeed in giving a command and it is quite another thing for that command to be fulfilled or obeyed. A command that p is an attempt to change the context so as to create a requirement or obligation for a certain agent to make it the case that p. That change is the essential effect of commanding. Think of it like a debt recorded onto a public record of what we owe to each other. After someone has been successfully commanded to do something, that person is publicly expected to do it.

Other directive acts have similar, yet slightly different, essential effects. I will ignore them until section 7. Until then, I will focus on the force of commands rather than the more general notion of directive force.

The context of a conversation is a publicly accessible record of information that serves to facilitate the purposes for which we communicate. A conversation is a collective project in which individuals cooperate for a shared purpose: usually that purpose is to share relevant information and means of articulating relevant issues, and often the purpose also involves coordinating action. The structure of a conversational context corresponds to such purposes.

---

[17] Stalnaker would likely object to the biconditional in this claim; Stalnaker 1978, p. 87 emphasizes that the essential effect of assertion does not *define* assertion. But I embrace it as a definition and I think I can respond to Stalnaker's worries. Since assertion, as I conceive it, is a generic act, there are a variety of assertive acts that have purposes much more specific than getting something acknowledged. Also, I admit there are non-linguistic means of getting it acknowledged that p. That suffices to make an assertion successful, I say. But I distinguish between the success of an assertion and its successful performance. Success only depends upon whether the essential effect of the assertion is registered in context, and that can happen without an utterance taking place. Success doesn't require performance.

Following Lewis 1979a, we can think of a conversation as a kind of game and the conversants are players in the game whose moves are recorded onto a conversational scorecard, much like how the scoreboard in a baseball game records hits, runs, outs, etc. The moves in a language game are speech-acts. A speaker can assert that p by recording that p onto the scorecard, putting it on the record. A speaker can command that p by recording that p onto a different part of the scorecard. The essential effects of these speech-acts is thus to change the scorecard in distinctive ways.

One part of the conversational scorecard records the information that has been asserted or otherwise acknowledged. (Information can be shared without anyone actually voicing it, and that is sufficient for it to be registered on the scorecard.[18]) This is similar to Stalnaker's common ground. I call it *the acknowledgement-list*. It is a set of propositions that serves as a conversational record of what was said and publicly acknowledged by the participants in the conversation. The possibilities under discussion are determined by the acknowledgement-list; they are those in which everything that has been acknowledged is true.

Another part of the conversational scorecard records the information that has been commanded. The conversants have publicly accepted the task of striving to make true the information on this *command-list* that involves them doing something. The permissible options for acting are determined by the command-list; the permissible options are those in which all commands are obeyed or fulfilled. The command-list thus records the publicly recognized requirements and is a means of making individuals publicly accountable. For example, John is

[18] For this reason, I distinguish the *successful performance* of a speech-act from its *success* simpliciter. Successful performance requires that a speaker actually make an utterance. But success only requires that the essential effect obtains. Compare Stalnaker 1978's claim that the essential effect of assertion can be achieved with any utterance: "…any obviously observable change in the physical surroundings of the conversation will change the presumed common knowledge. If a goat walked into the room, it would normally be presupposed, from that point, that there was a goat in the room. And the fact that this was presupposed might be exploited in the conversation, as when someone asks, *How did that thing get in here?*, assuming that others will know what he is talking about" (86).

expected to strive to make true that John sees to it that he clean his room, when that proposition is on the command-list. But John doesn't necessarily have to do anything when the information that Jane sees to it that she cleans her room is on the command-list; that's Jane's task.

This segmentation of context allows for a more perspicuous formulation of the essential effects of asserting and commanding, which define the conditions under which these speech-acts are successful. An assertion is successful just in case its information is registered on the acknowledgment-list. A command is successful just in case its information is registered on the command-list. And, importantly, when a speaker attempts to do these things in conversation, the attempts will succeed *as long as no one objects*. That is, other conversants can raise an obstacle to these speech-acts by objecting to the attempts to change context.

This notion of objecting is important, since it plays a crucial role in the success-conditions of the speech-acts of asserting and commanding. In my intended sense of 'objecting', objecting to the assertion that p is *not* an act of asserting that ~p. Rather, it is the act of *rejecting* the act of asserting that p, i.e. refusing to acknowledge that p.[19] Asserting that ~p has a different essential effect than rejecting the assertion that p. Asserting that ~p is an attempt to change the context by putting ~p onto the acknowledgement-list. But the act of rejecting the act of asserting that p does not try to add any information to the acknowledgement-list. Instead, it is an act of refusing to have the information that p on the acknowledgement-list (or any information which entails that p, for that matter). The success of an assertion requires the participation, or at least the acquiescence, of other members in the conversation, and of course there can be negotiation.

[19] Stalnaker mentions the act of rejecting an assertion, although his central focus is the act of asserting. See Stalnaker 1978, p. 87, especially fn 9. "It should be made clear that to reject an assertion is not to assert to the contradictory of the assertion, but only to refuse to accept the assertion. If an assertion is rejected, the context remains the same as it was."

Rejecting is a speech-act in its own right, but it is one that has an intimate relation with asserting. To reject an assertion is to overtly refuse to acknowledge what it asserts, and it is thus exactly the kind of thing that makes an assertion unsuccessful in its attempt to change the conversational record. For example, you might refuse to accept an assertion of the sentence 'John is in New York City today' if you have good reason to think he is somewhere else, and you can express your refusal without taking the further step to say where he is and even without asserting that he is not in New York City. A judicious use of 'no' in response to the assertion suffices to reject it, and there likely are other means.[20]

The essential effect of rejecting the assertion that p is the opposite of the essential effect of asserting that p. Whereas the assertion that p is an attempt to narrow down the possibilities under discussion to only those in which it is true that p by means of *adding* the information that p to the acknowledgement-list, rejecting that assertion is an attempt to ensure that there remain more than those possibilities under discussion by means of *subtracting* the information that p (or anything which entails it) from the acknowledgement-list (or to *block* its addition, if the rejecting is performed immediately in response to the asserting).

Whereas a successful assertion gets it acknowledged that p, a successful rejection *disacknowledges* that p, i.e. refuses to acknowledge it. For the act of asserting that p to be successful, everyone in the conversation must acknowledge that p. For the act of rejecting the assertion that p to be successful, only the refuser needs to disacknowledge that p.[21]

---

[20] In particular, responding with 'He might not be in New York City' would refuse to acknowledge the assertion. Perhaps that is what epistemic modals are suited for. However, I will leave this idea to be developed elsewhere.

[21] More carefully, an assertion that p is successful just in case the information that p is registered on the acknowledgment-list, and a rejection of the assertion that p is successful just in case no subset of the acknowledgement-list is such that its intersection entails that p. A refusal to acknowledge that p is thus also, at least implicitly, a refusal to acknowledge any set of propositions that entails that p. Still, it remains possible (and in fact quite likely) that there will be information that is not acknowledged that is also not disacknowledged. One rarely will acknowledge every piece of information that follows from what one already acknowledges, and those unacknowledged entailments are certainly not disacknowledged either.

The speech-acts of asserting and rejecting an assertion have to be defined together because they are defined in terms of their essential effects and one's effect conflicts with that of the other. If the act of asserting that p is successful then the act of rejecting the assertion that p is not successful, and if the act of rejecting is successful then the act of asserting is not successful. It is impossible for both acts to be successful at the same time, for that would require changing the context in ways that it cannot be changed. In short, these acts bear a relation of mutual *dispute*.

This very notion of dispute also applies to commands. Just as one can dispute an assertion, i.e. reject what it asserts, one can also dispute a command. Disputing works the same in both cases, because it affects the success-conditions of commanding and asserting in the same way. A command that p is an attempt to add that p to the command-list, and that attempt will succeed as long as no one objects. The objection could come from another speaker who also has the relevant authority, or it could come from the original commander herself if she changes her mind.

To dispute a command is to refuse to accept the requirement that that command tries to create. Since the command that p attempts to create a requirement by means of *adding* that p to the command-list, which would narrow down the permissible options for acting to only those in which it is true that p, disputing the command that p attempts to ensure that there remain more options for acting than those and it attempts to ensure this by means of *subtracting* the information that p (or anything which entails it) from the command-list (or to *block* its addition, if the disputing is performed immediately in response to the commanding).

The act of disputing a command that p is not itself a command, since it doesn't attempt to add anything to the command-list. In particular it is not a command that ~p, which would

attempt to make it required that ~p by adding that information to the command-list. Instead, the act of disputing a command is an act of *granting permission*. A command attempts to render certain courses of action impermissible, and therefore an act which refuses to have those options become impermissible is itself an act of keeping them permissible.

This conflict between command and permission is the same kind of conflict that obtains between assertion and rejection. An act of permitting that p is simply the act of disputing the command that ~p. For a command to successfully register its information on the command-list, everyone with the relevant authority has to acquiesce. But only one authoritative speaker needs to refuse in order for the act of disputing a command to be successful. The success conditions of these acts are contrary, just like those of asserting and rejecting, since the success of one implies that the other is not successful.

In particular, a command that p is successful just in case the information that p is registered on the command-list. A dispute of the command that p is successful just in case no subset of the command-list is such that its intersection entails that p. A refusal to accept a command that p is thus also, at least implicitly, a refusal to accept any set of commands which would require that the command that p be obeyed.[22]

The parallels between the acts of asserting and commanding, and also between the acts of disputing an assertion and disputing a command, are striking. A formal rendering of how they change context will be very similar. The parallel runs even deeper, into the appropriate grounds for disputing either an assertion or command.

One should dispute the command that p only if one sees some good, yet inconclusive, reason for acting in such a way that ~p. Likewise, one should dispute the assertion that p only if

[22] These success-conditions allow for a piece of information to be an implicit requirement, in the sense that it is not expressly commanded yet it is entailed by what is commanded. This corresponds to the case, for the assertive side of context, of an unacknowledged piece of information that follows from what is acknowledged.

one sees some good, yet inconclusive, reason for thinking that ~p. In both cases, an act of disputing signals that one sees good, yet inconclusive reason, for holding onto those possibilities or options which would be eliminated by acquiescing with the change of context that one disputes. I specify the reason as inconclusive because if one sees conclusive reason against acting so that p, or against thinking that p, then one should simply command or assert that ~p instead of simply disputing the command or assertion that p.

As I have emphasized, a conversation is a collective project, much like a language game. The players in the language game can negotiate about what gets recorded onto the scorecard, i.e. the conversational record. One players' attempt to change the scorecard will only succeed if the other players let that happen by not disputing the move. An act of disputing, whether applied to an assertion or a command, presents an obstacle. A speaker who raises such an obstacle might have to answer questions about why he did so; hence the need for him to see a good reason against letting the context change in the way attempted. (Perhaps the other conversants will try to cut him out of the conversation if he refuses to even talk about his reasons for presenting obstacles to their conversational projects.)

What happens to a piece of information once its membership on the conversational record is successfully disputed? Well, it certainly cannot just disappear from the discourse. A successful dispute raises an obstacle which itself needs to be recorded somehow. If an act of disputing is to have any real negotiating power, then it has to do more than simply strike information from the record; it must also mark that information as successfully disputed. To this end, I say that disputing an assertion not only removes information from the acknowledgement-list, it also places that information onto the disacknowledgment-list. Likewise, disputing a command not only removes information from the command-list, it also places that information

onto the disputed-command-list. When a piece of information is successfully marked as disputed, that information cannot be asserted or commanded (whichever the case may be) until the speaker who originally disputed it either removes the obstacle or instead is no longer an active participant in the conversation.

Section 3: Sentence-Meaning in Context

The players in our language game thus have four moves at their disposal. In uttering a sentence, they can either assert, command, or dispute an assertion or a command. The scorecard for this language-game needs to record all the significant moves made by the players, and so it has four places to register information corresponding to these four speech-acts.

The scorecard (i.e., the context) thus contains four sets of propositions, paired together by their inherent and mutual dispute. Hence, I represent a context as a pair of pairs of sets of information: <<AL, DAL>, <CL, DCL>>. The sets of information are the acknowledgement-list, the disacknowledgement-list, the command-list, and the disputed-command-list. These lists register the successful performance of their corresponding speech-acts.

The intersection of the acknowledgement-list is the context-set. It contains all the possibilities that are considered "live" or "open" in the conversation. The intersection of the command-list is the permission-set. It contains all the possibilities bringing about which are considered permissible actions in the conversation.[23]

[23] Here is where I need to treat propositions as sets of possible worlds. The notion of the context-set comes from Stalnaker 1978. The notion of the permission-set comes from the "sphere of permissibility" in Lewis 1979b.

No single piece of information can be contained in both AL and DAL, nor in both CL and DCL. That is guaranteed by the success-conditions of the speech-acts that are registered by those lists.

The meaning of a sentence, on the view being proposed, is its force and content. That is, a sentence is suited by linguistic convention, or the rules of the language game, for performing a generic type of speech-act, and thus for changing context in a characteristic way. The meaning of a sentence is the characteristic change in context that it is suited for.

An ordinary imperative sentence like (1), I will assume for now, is suited for commanding. (I will later take back this assumption when I talk about directive acts more generally; see section 7.) I will represent the meaning of (1) in two ways: first, as in (1a), with the force in capital letters and the content in lower case, and second, as in (1b), which shows the result of changing an arbitrary input context C = <<ALc, DALc>, <CLc, DCLc>> with a successful, literal use of the sentence. Since (1) is suited for commanding, it is suited for adding its information to the command-list and removing it from the disputed-command-list (if it is there).[24]

(1) John, be here in ten minutes!
(1a) COMMAND(p)
(1b) <<AL_C, DAL_C>, <CL_C + p, DCL_C – p>>

An ordinary declarative sentence like (2), on the other hand, is suited for asserting. Again, I will represent its meaning in two ways, first with the force and content specified as before, and second as the result of changing an arbitrary context. Since (2) is suited for

[24] The symbol '+' stands for set-union. The symbol '–' stands for set-subtraction, which I will define more carefully in chapter three section 5. Set-subtraction has the same result whether the information being subtracted was there or not, so the parenthetical qualification about whether some piece of information is on a list is not necessary.

asserting, it is suited for adding its information to the acknowledgement-list and removing it from the disacknowledgement-list (if it is there).

(2) John will be here in ten minutes.
(2a) ASSERT(p)
(2b) $\langle\langle AL_C + p, DAL_C - p\rangle, \langle CL_C, DCL_C\rangle\rangle$

Notice also that (1) and (2) are both associated with the proposition that p, and yet differ in what they are suited for doing with that content. They have the same content but differ in force.

To be thorough, I will also show the two ways of representing speech-acts which dispute the acts that (1) and (2) are suited for. An act of disputing (1a) attempts to remove its content from the command-list (if it is there) and add it to the disputed-command-list. An act of disputing (2a) attempts to remove its content from the acknowledgement-list (if it is there) and add it to the disacknowledgement-list.

(1c) DISPUTE(COMMAND(p))
(1d) $\langle\langle AL_C, DAL_C\rangle, \langle CL_C - p, DCL_C + p\rangle\rangle$

(2c) DISPUTE(ASSERT(p))
(2d) $\langle\langle AL_C - p, DAL_C + p\rangle, \langle CL_C, DCL_C\rangle\rangle$

Here is where the complication involving normative sentences comes into the picture.

As I described in chapter one, there are some reasons to think that a normative sentence like (3) is suited not only to assert, but also to be used nonassertively to create a requirement, i.e. to command. Therefore, I'm going to introduce a more complex way of changing context. Since (3) is a genuine declarative, it is suited to assert, and its assertive content includes a distinctive contribution from 'must'. But (3) is a special type of declarative in that it is also suited, because

of the occurrence of ‘must’, to command the content embedded by ‘must’. Additionally, it is suited for performing both of these speech-acts on a single utterance. In order to represent this complex meaning, I will stipulatively introduce the symbol ‘|’ to denote a function from two speech-acts to the hybrid act such that when a sentence is suited for performing that hybrid act it is suited for performing each component act individually and also both at the same time. Since (3) is suited for such a hybrid act, it has three literal uses as represented in the iterations of (3b).

(3) John must be here in ten minutes
(3a) ASSERT(Must(p))|COMMAND(p)

(3b-merely-descriptive) <<ALc + Must(p), DALc – Must(p)>, <CLc, DCLc>>
(3b-merely-nondescriptive) <<ALc, DALc>, <CLc + p, DCLc – p>>
(3b-performative) <<ALc + Must(p), DALc – Must(p)>, <CLc + p, DCLc – p>>

In specifying these three literal uses, I don’t mean to say that (3) is ambiguous between them. Instead, (3) has a single meaning, (3a), which suits it for changing context in three distinct ways. Treat this as a hypothesis for now: perhaps linguistic convention has stuck together two discrete meanings into a single sentence, much like Grice thought that ‘but’ made a contribution to assertive content (i.e. conjunction) and also had a separate conventional significance involved with drawing a contrast. (Some may claim that conventional implicature is a “myth”, but there certainly are words which have more than one conventional function even if they do not work exactly how Grice had envisioned it.)

Likewise, I also hypothesize that a sentence like (4) with deontic ‘may’ is suited for a hybrid speech-act: it is suited for three different literal uses: to assert information about what may happen, to grant permission, and also to do both.

(4) John may perform act A
(4a) ASSERT(May(q))|DISPUTE(COMMAND(~q))

(4b-merely-descriptive) <<ALc + May(q), DALc – May(q)>, <CLc, DCLc>>
(4b-merely-nondescriptive) <<ALc, DALc>, <CLc – ~q, DCLc + ~q>>
(4b-performative) <<ALc + May(q), DALc – May(q)>, <CLc – ~q, DCLc + ~q>>

Of course, these claims naturally invite many questions, not the least of which is what these propositions I'm naming with 'Must(p)' and 'May(q)' are supposed to be. I'll answer that question in section 6. Other details will be forthcoming in sections 8 and 9 of this chapter, as well as chapter three section 5.

I'm going to use these hypotheses about how declarative sentences with deontic modals are "directive declaratives" to explain the linguistic considerations that were the focus of arguments from chapter one. To the degree that the hypothesis offers good, simple explanations of the phenomena, that is confirming evidence that the hypothesis is true.

Section 4: Denying Commands

The argument from denial focuses on linguistic data involving discourses in which a command is given but is met with refusal. (See chapter one, section 6.) It seems that denying a command is equivalent to permitting one to ignore the command, which is exactly what is involved in denying a deontic 'must' claim.

My view explains these data with the claims (i) that refusing to accept a command is *disputing* a command, and (ii) that an act of permitting is identified as such an act of dispute. Commanding and disputing a command bear exactly the refusing-relationship highlighted by these data.

(5) Commander: ‘Sit down!’
(5a) COMMAND(p)
(5b) $<<AL_C, DAL_C>, <CL_C + p, DCL_C – p>>$

(6) Commander’s Addressee: ‘No, I don’t have to do that’
(6a) DISPUTE(COMMAND(that p) and ASSERT(~Have-to(p))
(6b) $<<AL_C + \sim$Have-to(p), $DAL_C – \sim$Have-to(p)>, $<CL_C – p, DCL_C + p>>$

(7) Commander’s Addressee: ‘No, I’m allowed to do otherwise’
(7a) DISPUTE(COMMAND(that p) and ASSERT(Allowed(~p))
(7b) $<<AL_C$ + Allowed(~p), DAL_C – Allowed(~p)>, $<CL_C – p, DCL_C + p>>$

The responses in (6) and (7) count as disagreeing with the command they respond to because they constitute performances of the act of disputing the command. Although they involve the words ‘have to’ and ‘allowed’, rather than the deontic modals ‘must’ and ‘may’, the explanation for the disagreement is the same. (I will come back to the difference between these words in section 6.) On the hypotheses that deontic ‘must’ is suited for commanding and that ‘may’ is suited for permitting, i.e. disputing a command, the exchanges above in (5) – (7) count as cases of disagreement in exactly the same way as the exchange below in (8) – (9). In each exchange, an act of commanding is refused by an addressee who disputes the command.

(8) Commander: ‘You must sit down.’
(8a) ASSERT(Must(p))|COMMAND(that p)
(8b) $<<AL_C$ + Must(p), DAL_C – Must(p)>, $<CL_C + p, DCL_C – p>>$

(9) Commander’s Addressee: ‘No, I may do otherwise’
(9a) ASSERT(May(~p))|DISPUTE(COMMAND(p))
(9b) $<<AL_C$ + May(~p), DAL_C – May(~p)>, $<CL_C – p, DCL_C + p>>$

The disagreement involved in these exchanges is fundamentally different from a more familiar type of disagreement deriving from the nature of inconsistent propositions. The difference can be brought about in the scenario mentioned in chapter one, section 6, in which two commanders argue about what Jones is to do.

(10) Commander 1: Jones, swab the deck!
(10a) COMMAND(p)
(10b) <<AL_C, DAL_C>, <CL_C + p, DCL_C – p>>

(11) Commander 2, reply A: No, Jones, don't swab the deck!
(11a) COMMAND(~p)
(11b) <<AL_C, DAL_C>, <CL_C + ~p, DCL_C – ~p>>

(12) Commander 2, reply B: No, Jones doesn't have to swab the deck.
(12a) DISPUTE(COMMAND(p)) ASSERT(~Have-to(p))
(12b) <<AL_C + ~Have-to(p), DAL_C – ~Have-to(p)>, <CL_C – p, DCL_C + p>>

(13) Commander 2, reply C: No, Jones won't swab the deck.
(13a) ASSERT(~p)
(13b) <<AL_C + ~p, DAL_C – ~p >, <CL_C, DCL_C>>

The responses from Commander 2 in (11) and (12) exemplify a distinction between two ways to disagree about what someone is to do. The speech-act specified in (11a) *disagrees-in-content* with the act specified in (10a), since it responds with the same force but with the opposite content of the act it responds to. These acts disagree because if they were both to succeed in changing context, as specified respectively in (10b) and (11b), their mutual success would render the permission-set empty: there would be no permissible options for Jones.

In contrast, the speech-act specified in (12a) *disagrees-in-force* with the act specified in (10a), since it responds with the opposite force yet the same content as the act it responds to. These acts disagree because it is impossible for them both to be successful at the same time. As specified in (10b) and (12b), these acts attempt to change context in incompatible ways; one tries to ensure that p is on the command-list and the other tries to ensure that it is not.

Finally, note that (13) does not obviously disagree with Commander 1's utterance.[25] It asserts that the command will not be complied with, which is compatible with the command's successfully ensuring that there is a requirement for Jones to swab the deck.

Section 5: Semantic Conflict and Redundancy

Section 5.1: Semantic conflict

The linguistic phenomena involved in the argument from semantic conflict center around ways that deontic 'must' and 'may' can occur in sentences that are inconsistent with imperatives. (See chapter one section 4.)

The speech-act semantics that I have sketched can explain inconsistent imperative sentences in terms of inconsistent commands. (14), for example, is an inconsistent sentence because it is suited for performing speech-acts whose success would put inconsistent information on the command-list: either it is a command to make true an inconsistent proposition, as in (14a), or there are two commands being conjoined by 'but' that together would put incompatible information onto the command-list. (The topic of how to conjoin nondescriptive clauses will be more squarely addressed in chapter three section 5.) The speech-acts for which (14) is suited disagree-in-content; the success of (14a) or (14b) would render the permission-set empty and thus ensure that there is nothing the agent can do to fulfill all of his obligations. ($14a_2$) and ($14b_2$) show how an arbitrary context C would be updated with the success of the speech-acts specified in ($14a_1$) and ($14b_1$).

[25] It might nevertheless indirectly disagree with the command, by denying one of its presuppositions. It is plausible that an act of commanding presupposes that it is possible for the command's performance to bring about compliance. If that's right, then the assertion in (13) might count as disagreeing with the command in (10) in virtue of denying that it will be complied with.

(14)# Do it, but don't do it!
($14a_1$) COMMAND(p and ~p)
($14a_2$) $\langle\langle AL_C, DAL_C\rangle, \langle CL_C + (p \text{ and } \sim p), DCL_C - (p \text{ and } \sim p)\rangle\rangle$

($14b_1$) COMMAND(p) and COMMAND(~p)
($14b_2$) $\langle\langle AL_C, DAL_C\rangle, \langle (CL_C + p) + \sim p, (DCL_C - p) - \sim p\rangle\rangle$

The explanation is very similar for cases in which deontic 'must' semantically conflicts with an imperative. Since deontic 'must' contributes the force of a command to the sentences it occurs in, (15) and (16) are like (14) in being suited for speech-acts whose success would render the command-list inconsistent. Depending on what is being conjoined by 'but', sentence (15) is either suited for the speech-act specified in ($15a_1$), a hybrid assertion-command, or else for the speech-acts specified in ($15b_1$), a hybrid assertion-command plus a command. ($15a_2$) and ($15b_2$) show how the success of these acts would update an arbitrary context C. The explanation for (16) is exactly parallel to that for (15b): (16) involves two sentences that are inconsistent with each other because they are suited for inconsistent speech-acts. The fact that the declarative clauses in these sentences are also suited for asserting does not interfere with the explanation of why they are inconsistent sentences.

(15)# You must go to confession, but don't do it!
($15a_1$) ASSERT(Must(q))|COMMAND(q and ~q)
($15a_2$) $\langle\langle AL_C + \text{Must}(q), DAL_C - \text{Must}(q)\rangle, \langle CL_C + (q \text{ and } \sim q), DCL_C - (q \text{ and } \sim q)\rangle\rangle$

($15b_1$) ASSERT(Must(q))|COMMAND(q) and COMMAND(~q)
($15b_2$) $\langle\langle AL_C + \text{Must}(q), DAL_C - \text{Must}(q)\rangle, \langle (CL_C + q) + \sim q, (DCL_C - q) - \sim q\rangle\rangle$

(16)# Go to confession! But you mustn't do that.
($16a_1$) COMMAND(q) and ASSERT(Must(~q))|COMMAND(~q)
($16a_2$) $\langle\langle AL_C + \text{Must}(q), DAL_C - \text{Must}(q)\rangle, \langle (CL_C + q) + \sim q, (DCL_C - q) - \sim q\rangle\rangle$

The explanation for how deontic 'may' semantically conflicts with an imperative is slightly different. (17) isn't suited for conflicting commands. Rather, it is suited for two speech-acts that dispute each other. It is impossible for both of these acts to be successful, and so (17) is self-defeating. ($17a_2$) shows how an arbitrary context would be updated with the sequential success of each speech-act specified in ($17a_1$); the success of the first act is rendered unsuccessful by the success of the second.

(17)# Don't do it! But you may do it.
($17a_1$) COMMAND(p) and ASSERT(May(p))|DISPUTE(COMMAND(that p))
($17a_2$) $<<AL_C + May(p), DAL_C - May(p)>, <(CL_C + p) - p), (DCL_C - p) + p>>$

Two points need to be made about these explanations of semantic conflict. First, the difference between the kinds of conflict in (15) and (16), on the one hand, and (17) on the other, corresponds to the difference between two ways of disagreeing with a speech-act that was described in section 4 of this chapter. Since a literal use of (16) can be interpreted as performing the acts specified in ($16a_1$), which disagree-in-content with each other, it follows that the sentences in (16) are *inconsistent-in-content*. Since a literal use of (17) can be interpreted as performing the acts specified in ($17a_1$), which disagree-in-force with each other, it follows that the sentences in (17) are *inconsistent-in-force*. The sentences inherit the conflicting properties of the speech-acts for which they are conventionally suited.

Second, although the additional assertive potential of the declarative clauses in (15) – (17) does not interfere with the foregoing explanations of why the relevant sentences are inconsistent, it does point out the need for an important qualification. The sentences are inconsistent, but they nevertheless can be used literally and coherently, as long as a speaker does not perform every act for which they are literally suited. This is why it matters that the

declarative clauses are suited for a hybrid speech-act: such a clause is suited for performing each component act individually, in addition to being suited for performing both.

So, it is possible to use the declarative sentence in (16) merely descriptively, only to assert that the addressee mustn't go to confession, in which case the utterance of both sentences in (16) need not perform inconsistent speech-acts. There needn't be any conflict between the assertion and the command. For example, a speaker might explicitly note that she is only using the 'must' sentence assertively by saying, 'Go to confession! Yet, according to the rules of the game we are playing, which I don't agree with, you mustn't go to confession. Still, go to confession!'

Likewise, for (17): as long as a speaker uses the normative clause merely descriptively, to assert that the addressee is permitted to do the relevant action, there need not be any conflict between the assertion and the command. A speaker can assert that an action is permitted according to certain rules without thereby contradicting her command not to do it.

This is a peculiar feature of the view that needs further explanation. Because a sentence can be suited for more than one speech-act, it can be literally used in distinct ways. So, a sentence, or sequence of sentences, that is inconsistent might nevertheless have a coherent use on which it does not count as performing every act for which it is suited.

I will come back to this feature in section 6 where I will explain what the assertive contents of these sentences are. The information asserted by merely descriptive uses of deontic 'must' and 'may' at least implicitly involves crucial qualifications such as 'according to the Catholic moral code…', and these qualifications help explain how a speaker can use a sentence like (15) – (17) consistently.

Section 5.2: Redundancy and Reinforcement

The second group of linguistic data shows how it can be redundant or reinforcing to add an imperative to a deontic 'must' sentence. (See chapter one section 5.) My view explains this phenomenon in terms of re-iterating commands, which tries to change context in the same way twice. (18) repeats a command, which can be redundant or instead might emphasize urgency.

(18) You must go to confession. Do it! (#And furthermore, do it!)
(18a) ASSERT(Must(p))|COMMAND(p) and COMMAND(p)
(18b) $\langle\langle AL_C + Must(p), DAL_C - Must(p)\rangle, \langle(CL_C + p) + p), (DCL_C - p) - p\rangle\rangle$

Reversing the order of the sentences is subtly different. It is not totally redundant to add a deontic 'must' claim to an imperative. Yet there does seem to be something redundant or reinforcing about it. My view explains this nicely, since the 'must' sentence is suited for asserting in addition to commanding. The assertion can be understood as giving a reason or explanation for the command. Still, the command is reiterated, so there is a redundancy involved, too.

(19) Go to confession! You must do it.
(19a) COMMAND(p) COMMAND(p)|ASSERT(Must(q))
(19b) $\langle\langle AL_C + Must(p), DAL_C - Must(p)\rangle, \langle(CL_C + p) + p), (DCL_C - p) - p\rangle\rangle$

Section 6: Normative Contents and the Means of Expressing Them

Both 'have to' and 'must' are expressions for deontic necessity. They have deontic meanings that are used to convey information about requirements, obligations, and duties. On my view, the following sentences are all suited to assert the same information.

(20) John *must* be in his office in ten minutes
(21) John *has to* be in his office in ten minutes.
(22) John is *obligated* to be in his office in ten minutes.
(23) John *needs* to be in his office in ten minutes.
(24) The relevant rules, laws, and demands *require* that John be in his office in ten minutes.

My account of the information conventionally associated with sentences of the form 'Must(p)' or 'May(p)' builds upon foundational ideas from Kratzer 1977. Using a sentence that expresses deontic modality can elicit contextual information that helps determines what is said. Such a "conversational background" for deontic modals is usually a set of rules, laws, or priorities – propositions that have some importance for how we act. Deontic modals are quantifiers whose domain is restricted by a deontic conversational background. The restrictions can be overtly specified using a phrase like 'according to the catholic moral code…' or it can be left implicit, e.g. if the restriction is contextually salient.

Suppose that it is contextually salient that we are talking about what U. S. law requires. So, a use of deontic 'must' or 'may' will say something about those possible worlds in which U. S. laws are complied with, without assuming that the actual world is in that group. Using 'must(p)' says that *all* of those worlds in which the laws are followed are p-worlds (worlds in which it is true that p). Using 'may(p)' says that *some* of those worlds in which the laws are followed are p-worlds.

Other expressions for deontic necessity, I claim, are also universal quantifiers whose domain is restricted by a deontic conversational background. There can be different such backgrounds in different contexts.

There are interesting differences among expressions for deontic necessity which divide 'must' from the rest. The other expressions can be used to report on past requirements. They can be inflected in past-tensed forms and they can easily take past-tensed complements. But

'must' cannot inflect for the past-tense and when it takes a past-tensed complement it has a dominant epistemic reading. (See chapter one section 3.2)

(25a) John has to have paid his debts.[26]
(25b) John had to pay his debts.

(26a) John is obligated to have paid his debts.
(26b) John was obligated to pay his debts.

(27a) John needs to have paid his debts.
(27b) John needed to pay his debts.

(28a) The rules require that John already have paid his debts.
(28b) The rules required that John pay his debts.

(29) John must have paid his debts. (epistemic reading is dominant)

The difference between these expressions for deontic necessity is that 'must' is conventionally suited to be used to command, whereas the others are merely assertive. That's why it is much easier to use the expressions other than 'must' to report on past obligations.

My claim here that 'must' is suited for a hybrid act whereas the other expressions for deontic necessity are only suited for asserting needs to be explained carefully. I will explain in a moment exactly what kind of information a sentence with 'must' like (20) is suited for asserting. But I also need to explain how it is that merely assertive sentences such as (21) – (24) can nevertheless used performatively.

The fact that (21) – (24) are merely assertive means that linguistic convention suits them to be asserted. Since they are expressions for deontic necessity, as opposed to some other type of modality, their conventional meanings suit them to pick out deontic conversational backgrounds. But it remains possible to use those sentences to do more than assert, and there are plausible

[26] This sentence stands out because its most salient reading is epistemic. Still, there is a deontic reading available on which it is now the case that John has an obligation to have paid his debts at some time in the past.

explanations of why an audience would be justified in interpreting such a use as more than an assertion. If it is recognized and salient in the conversational context that speaker S has the authority to tell John what to do, and then S utters (22), the audience would be justified in thinking that S's utterance made it required for John to be in his office in ten minutes.

Another way in which a sentence like (21) – (24) could be used to direct is if the participants in the conversation are trying to figure out what John is to do. Suppose John is a member of the conversation and he has just asked us for help in figuring out what he is to do. An utterance of (22) in this context would be understood as an attempt to help answer that question, and thus as pointing towards one of his alternatives as the thing to do. So, even if the speaker who utters (22) doesn't have the authority to tell John what to do, and in fact even if the utterance is intended as a mere assertion, the utterance can be interpreted as a partial answer to what John is to do which provides John with some guidance for how to act. This is what I think happens when an utterance of a sentence like (22) indicates a *prima facie* obligation for John to be in his office in ten minutes; it indicates that there is some reason for John to do so. A commanding use of (22), by contrast, would indicate an outright obligation and thus that there is conclusive reason for John to do so.

Still, although it is possible to use (21) – (24) performatively, to create an obligation for John to be in his office in ten minutes, it is easier to use 'must' as in (20) to do so. 'Must' is additionally suited for the non-assertive act of commanding.

Deontic 'must' doesn't easily take past-tensed complements because it is suited for commanding. It doesn't make sense for a command to be directed at the past; we all know that we cannot change the past, no matter how strongly we will or desire it to change. Still, 'must' is also suited for asserting, and this complicates the linguistic data. It seems to me that if a speaker

makes it clear that she is not trying to direct action but instead is merely describing a fact, then deontic ‘must’ can be used with a past tensed complement.

(30) It doesn’t matter to me if we follow the rules while playing this game. But, according to the rules of Monopoly, you must have paid a tax on your previous turn.

So, it is only the performative use of deontic ‘must’, and its propensity to be used that way, that stands in the way of it taking past tensed complements. The fact that it is so difficult to use ‘must + PAST’ deontically confirms the hypothesis that ‘must’ is suited for commanding.

If I am right that deontic ‘must’ stands apart from other expressions for deontic necessity with respect to its suitability to command, then this also brings along a subtle difference in the information they are suited to assert. The other expressions such as ‘is obligated to’ and ‘is required to’ can be used to assert information about past obligations and requirements. But since ‘must’ is suited to guide action, it is suited to assert information about future courses of action, in the following way.

It seems to me that deontic ‘must’ and ‘may’ have a *standard* interpretation on which their conversational background is identified with a familiar source: the command-list. The standard interpretation is justified by default; unless there are indications otherwise, an audience is justified in interpreting a use of ‘must’ or ‘may’ such that its conversational background comes from the command-list. Nevertheless, it remains possible to use ‘must’ or ‘may’ literally (yet nonstandardly) with another deontic conversational background.[27] It is this connection between the command-list and ‘must’, exemplified in standard uses, that distinguishes ‘must’ from the other expressions for deontic necessity like ‘is obligated to’ and ‘is required to’, which lack the conventional connection to the command-list.

[27] For example, you might wish to report what Catholic rules requires of someone, even though our conversation has not publicly accepted those rules as commands or requirements.

More precisely, when they are used standardly, deontic 'must' and 'may' elicit a relevant subset of information from the command-list: if there is an agent in the sentence, then the relevant information includes every future-relative entry on the command-list that involves that agent performing some available action.[28] If there is no agent in the sentence, then the relevant information is every entry on the command-list that is future relative to the utterance.

On the standard interpretation, then, deontic 'must' and 'may' quantify over the worlds in which the relevant information from the command-list is true. When the proposition embedded by the modal involves an agent doing something, the relevant subset of the command-list includes those pieces of information in which that agent performs some future action. So, 'John must wear a seat belt' is standardly interpreted as asserting that all of the worlds in which the information from the command-list about John's actions is true, are worlds in which John wears a seat belt.

The standard interpretation assigns the following contents to deontic 'Must(p)' and 'May(p)'. They are restricted quantifiers, and the restriction is given in context according to the agent in the scope. Additionally, the information will be about situations that are future relative to the time of utterance.

The information standardly asserted in 'must(p)'

Quantifier	restrictor		scope/prejacent
All	worlds w such that w ε	**rCL**	are worlds in which it is true that **p**

The information standardly asserted in 'may(p)'

Some	worlds w such that w ε	**rCL**	are worlds in which it is true that **p**

[28] The restriction to a contextually relevant subset of the command-list grounds the claim that what an individual must (or may) do is determined by what that individual has been commanded (or permitted) to do, and not by what *other* persons have been commanded or permitted to do. The qualification of "available" actions is included in order to guarantee that any past commands which can no longer be fulfilled (e.g. because more recent information shows that to be impossible) are not included in the relevant subset.

I say that the standard interpretation of using ‘must(p)’ is that it asserts the information just specified, but that importantly does *not* imply that non-assertive uses of it are non-standard. In fact, a standardly interpreted use of ‘must(p)’, absent objection, can actually add the information that p to the command-list. That would happen if the context of that conversation did not already include that information there. This explains what it is to use deontic ‘must’ performatively, which I’ll now describe in more detail.

Asserting the information that is standardly associated with ‘must(p)’ is a special kind of assertion; it involves a claim about the conversational commitments. If the assertion succeeds, then the command-list must be the way that it is asserted to be. That is, if an utterance of ‘must(p)’ succeeds in changing the context so that it is acknowledged that the command-list contains the information that p, then the command-list contains the information that p.

Additionally, if a speaker successfully commands that p, then the context changes so that it is true that the command-list contains that p. Moreover, that change is a publicly recognized fact about the conversation. So, the context has thereby changed so that it is acknowledged that the command-list contains that p, and thus the success of the standard assertion of ‘must(p)’ is guaranteed by the success of the command that p. The two speech-acts that are successfully performed on a performative use of ‘must(p)’ have a very similar conversational effect, despite achieving it in different ways.

Despite the fact that these acts affect context in such a similar way, they are different. The explanation of how they change the context is different. The command changes CL, which compels a derivative change in AL. The assertion changes AL, which can compel a derivative change in CL. An imperative sentence used to command does not attempt to convey the information that the command was given, although that is a derivative effect of the command. A

declarative sentence used to assert first and foremost conveys information, but it is possible for that information to be such that acknowledging it requires another part of context to change.

The assertion standardly performed by using ‘May(p)’ is also special, since it can effect context by granting permission that p. The details are quite similar to those for ‘Must(p)’.

Section 7: Questions and Answers, ‘Must’ and ‘Should’

The argument from questions and answers (from chapter one section 7) focuses on linguistic data involving how normative questions can be answered by imperatives. It also implicitly raises the issue of how deontic ‘must’ differs from ‘should’. Before I can explain these data, I must first introduce ‘should’ sentences, interrogative sentences, and the speech-acts of advising and asking questions into my semantic framework. In this chapter so far, I have focused more narrowly on the modals ‘must’ and ‘may’, and the acts of commanding and permitting.

Sec. 7.1: Advice as a special type of directive speech-act

Earlier, I mentioned that there is more than one type of directive speech-act and that they involve subtle differences in their essential effects despite having the common directive function of guiding action. Now is the time to confront this issue directly.

Imperatives are suited to direct, but we can distinguish more specific types of directive acts that imperatives are often used for. Imperatives can be used to command (31a), to request (31b), to advise (31c), and to permit/invite (31d). These uses can be distinguished by how they can be described post-performance.

(31a) *Finish your chores!* (#but you don't have to; #but I don't want you to, #but you shouldn't, #but you're not allowed to)
(31b) *Please, help me tidy up!* (but you don't have to; #but I don't want you to; #but you shouldn't; #but you're not allowed to)
(31c) *Wait until the price is right!* (but you don't have to; but I don't want you to; #but you shouldn't; #but you're not allowed to)
(31d) *Take as many as you like!* (but you don't have to; but I don't want you to; but you shouldn't; #but you're not allowed to)

This variation shows the flexibility of the category of directive speech-acts.

I have already explained how to understand the acts of commanding and permitting. They form a natural pair, and the command-list is sufficient to explain both of their essential effects. But we should expand our perspective in order to account for other action-guiding speech-acts such as requests, advice, and also promising.

A promise is a way of making oneself publicly accountable; the promisor creates a requirement for herself and ties herself to the promisee in the sense of making herself answerable to the promisee. In this way, promising is like a first-personal variation of commanding. A command involves an authority making an addressee publicly accounting by creating a requirement for her and tying her to the commander in the sense of making her answerable to the commander. So, with the plausible assumption that a promisor has the authority to create requirements for herself, the command-list can record those requirements produced by promises as well as commands.

Requesting is like commanding in expressing a speaker's will, wish, or desire for something to happen, and so it is likely to be accounted for in a similar way. But requests do not create requirements, nor do they even suggest that one has authority to tell someone what to do. Requests permit refusal, and are more polite than commands.

But it is advising that needs special attention here. It sticks out from the others. Advice isn't involved with requirements or obligations, and it doesn't necessarily have anything to do with the advisor's own desires. It makes perfect sense for an advisor to tell an addressee to do something while denying any desire that it actually be done. Advice can even be given reluctantly by an advisor who doesn't really want for the advice to be followed. Moreover, it always makes sense to ask for the *reasons* behind advice. One can undermine advice by showing that there following it couldn't do any good. This dramatically contrasts with commands and requests, which either don't require any reasons behind them or else the fact that the someone wants something is itself sufficient reason.

There are two important components in an act of giving advice. First, advice is meant to be *good for the one being advised*. Advice is tailored to help out the recipient. Advice can attempt to help an addressee to achieve her goals, or instead to re-prioritize or even replace what she is aiming for if the advisor thinks that doing so would be of benefit.

Second, advice *suggests* an action or choice. There is an important difference between the bare evaluation that x is better than y, and the direction or urging offered in advising someone to choose x rather than y. A good cost-benefit analysis goes a long way towards directing action, but it does require an extra *oomph*.

Whatever this second, "suggestive" feature is, it is surely at the heart of imperative semantics. Perhaps the way to incorporate the variety of imperatival force under a single, generic type of force is to begin with the lowest common denominator. The act of suggesting can be understood as a weak directive which is part of every direct act. The variety comes from what else is included: when the expression of a speaker's will or desire is included with a suggestion, a request is performed; when the speaker additionally has the relevant authority, a

command or promise is performed; when there is no speaker's will or desire involved but rather the suggestion bears an intrinsic relationship with an evaluative basis that serves as a reason for action, an act of advising is performed. On this account of imperatival force, there would be a suggestion-list that is divided between those suggestions that have a rational basis and those that express speakers will or desire. The command-list would be an important subset of the latter. It remains to be explained how the essentially rational suggestions are to be accounted for.

In order to explain the act of advising, I will expand the conception of context so far explained, so that it includes a list of conversants' goals: the goal-list. I won't, however, simply postulate the goal-list, GL, as another component of context on the same level as the acknowledgement-list, AL, and the command-list, CL. Instead, GL is a subset of AL. The information in GL is the information in AL that has the form 'X has the goal that p' or 'It is X's aim that p'. The concept of a goal or aim is essentially that of something to strive for. It is good for someone if her goals are achieved, and it is bad for her if they aren't. Furthermore, it is assumed in every conversation that the conversants have some goals or others, and in particular that each conversant has the goal of fulfilling his obligations, as represented in the command-list.

There are individual goals and there are collective goals. Individual goals belong to a single conversant and the extent to which they are achieved reflects how well things are going for that individual with respect to those goals. Collective goals belong to a group, e.g. the group of conversants, and they reflect how well things are going for the group in relation to those goals.

Some goals might be given more priority over others. Let's add the idealization that goals can be assigned a numerical value that determines their priority relative to other goals. A goal with priority 1 has greatest priority, and a goal has greater priority than another just in case its numerical value is lower. So, the information in GL has the form 'X has the goal that p with

priority level n', although it is not necessary for goals to be assigned explicit priorities. A special case is the goal of fulfilling one's requirements: it is assumed that the goal of fulfilling one's requirements has a priority of 1.[29]

The purpose of the information in GL is to provide a *value-ordering*. A given set of possible worlds can be organized into a value-ranking based on how many goals are achieved in those worlds. There is a ranking for each individual, based on that individual's goals, and there are also rankings for groups and their goals. A value-ordering is different from other kinds of orderings, because it ranks possibilities expressly in terms of how good they are for an individual or group. Since goals are things that we care about, the ranking of possibilities they deliver pertain to how well our lives go.[30]

For example, suppose that John has goals with the contents that p, that q, and that r, which aren't given any particular priority, in addition to his goal of complying with any commands directed his way. The relevant possibilities to order, then, will be those that are compatible with his complying with all his obligations (since complying with CL has top priority). Of those worlds, the worlds that are best with respect to John's goals in that context are ones in which it is true that p, that q, and that r. Worlds in which some but not all goals are achieved are less good for John, though they are still better for John than worlds in which no goals are achieved. It is also possible to rank worlds in which John fails to comply with his obligations, since those in which his goals are achieved will be better for him than others in

[29] This assumption builds it into the very nature of the communicative purposes involved with coordinating action that we have at least the pretense of caring about living up to our public responsibilities. Of course, it is always possible to doubt whether living up to such responsibilities is actually in one's best interest. Most doubts about morality, for example, or about the prudence of being altruistic or just, suggest that one consider the benefits of dropping, at least privately, the goal of striving to pay one's debts to others.

[30] I am not proposing an analysis of the concept of well-being or self-interest. It seems possible that an individual can strive after goals the achievement of which would not in fact be good for him. In such a case, we could advise him *paternalistically*, based on an alternative set of goals, on the grounds that adopting the alternative goals would benefit him more than what he actually strives for. Still, if someone strives after a goal, that means that she cares about achieving it, and there is some presumption that things will go better for her if she achieves it.

which they are not. Any worlds can be given such a goal-ranking, and it might depend on context which comparisons are of interest.

This kind of value-ordering has its place amongst other notions intertwined with deontic modality. It represents what is *desirable*, or *valuable*, with respect to an agent's goals. Something isn't desirable simply because it is desired, but rather because it is worthy of being desired; it *should* be desired. The '-able'/ -'ible' suffix can stand for deontic modality.[31]

Sec. 7.2: The meaning of deontic 'should'

This value-ordering plays a role in the semantics for deontic 'should'. A sentence of the form 'should(p)' implicitly compares the p-worlds to other alternatives provided by context, and the assertive content of the sentence in that context is true just in case the p-worlds are better than all the alternatives. (If no clear alternatives are provided, then by default the alternatives are the ~p-worlds.) Descriptive/assertive uses of 'should(p)' convey this contextually determined information when used literally. But 'should(p)' is suited for more than that, because it is suited to advise. An act of advising suggests an alternative for acting as the thing to do. An example will help explain what I mean.[32]

Imagine that I know that some available action of yours, action A, is clearly what will most benefit you, but that it will have a non-serious, yet rather inconvenient, negative effect on me. You, however, are uncertain what to do. I would hesitate before voluntarily telling you that you should do action A, since my doing so would communicate to you the suggestion to do it,

[31] Kratzer 1981 argues that modality is gradeable, and that therefore we should use ordering semantics to explain modal expressions. Her arguments only apply to deontic modality insofar as desirability is quantifiable. Correspondingly, I only use orderings to explain this part of deontic modality. Obligation, permission, and requirement are not gradeable, and don't need to be explained with orderings.

[32] Thanks to Nicholas Sturgeon for emphasizing this kind of example to me. It is possible that my understanding of it differs from his.

and I don't want you to do it. If you overtly asked me for advice, and if I were to reply honestly, I would likely explain my evaluation of the situation rather than create any appearance of urging you to do something that would certainly harm me. I would not simply say 'You should choose A' because then you would likely understand me as advising you to choose A. Instead, I would say something like 'Choosing A would be best for you' or 'It is in your interest to choose A', which has the evaluative content but doesn't itself create the appearance that I'm suggesting for you to choose A. The evaluative assertion can be qualified by adding that I don't advise you to choose A, and that I urge you not to choose A because it would harm me.

So, a sentence of the form 'should(p)' is suited for each of two kinds of speech-acts, one assertive and one nonassertive, much like how a sentence like 'must(p)' is suited for asserting and commanding. A sentence like 'should(p)' is suited to assert the proposition that p-alternatives are better, according to the contextually determined value-ordering, than the other alternatives. A sentence like 'should(p)' is *also* suited for advising or suggesting to an agent, if the information that p involves an agent, to make it the case that p. Suppose that sentence (32) has the form 'should(p)', where 'p' names the proposition that John will be here in ten minutes, and that the context determines that the alternatives are simply the ~p-possibilities. Then, (32) has the meaning specified in (32a) in that context.

(32) John should be here in ten minutes
(32a) ASSERT(Better(p, ~p))|ADVISE(p)

Sentence (32) is suited for being used to perform a hybrid act, and thus is suited for each component act as well as for both together. The assertive component act aims at getting its content acknowledged, of course, and so an assertion of (32) is an attempt to add a proposition to

the acknowledgement-list: that the p-possibilities are better than the ~p-possibilities, according to John's goals.

The other component of the hybrid act functions to suggest that someone act in a particular way, in this case for John to make sure he is in his office in ten minutes. The suggestion counts as giving advice since it is based upon the evaluation in the assertive content. Advice aims to direct the advisee to the best action, as evaluated by contextually provided goals. Thus, the advice is "correct" if it suggests the alternative, of the actions available to the advisee, that is actually best for the advisee to do. And if it is unclear what would be best for the advisee because there isn't a precise set of goals with which to evaluate the alternatives, then the "correct" advice is up to the advisor (or perhaps the notion of correctness simply doesn't apply).

These claims can help explain the distinction, noted in chapter one section 7, between the goal-relative and the goal-open ways of giving advice. When an act of advising is performed in a context which includes a precise set of goals with which to evaluate the alternatives at hand, the advice is goal-relative and it is correct advice just in case it suggests doing the act that is best in relation to those goals. But when there isn't a precise set of goals in the context, it is left to the advisor to supply the goals. Such goal-open advice may implicitly advise someone to have goals that she does not have. An advisor might intentionally ignore a contextually salient set of goals in order to suggest that the advisee re-prioritize. Paternalistic advice is a good example of goal-open advice.

Sec. 7.3: Interrogative sentences

Interrogative sentences are suited for the act of asking a question. I will explain this act as the adoption of a collective goal for the conversants to figure out who, what, when, where,

why, whether, etc.[33, 34] This act involves a semantic object, a question, denoted by the interrogative clause. A question is a set of alternatives, each of which is a complete answer to the question.[35] The act of asking is itself an attempt to create a goal for the conversants, a goal that is achieved when the correct answer is selected from amongst the alternatives presented. If no one objects to the asking, then the goal is created.

There are two kinds of questions, which can be distinguished by the acts involved in asking and answering them: we can ask *what is the case* and we can ask *what to do*. Asking the first type of question makes it desirable to obtain true information. Asking the second makes it desirable for the questioner to obtain direction. Both acts partition possibilities into discrete options, either the ways the world might be or the ways an agent can act, and present these options as alternatives to be selected from. The alternatives, however, are not just pieces of information but rather information presented with a certain force – the alternatives are ways of changing the context. The act of answering each kind of question shows the difference.

Answering a question is an act of selecting one of the alternatives, and thus changing the conversational score by eliminating the other alternatives from consideration. Telling someone what is the case is an assertive act that adds information to the acknowledgement-list. That provides the correct answer only if it is a true assertion. Telling someone what to do, however, involves a nonassertive act of suggesting an option for acting, e.g. giving advice. The act of advising, when performed in response to someone asking what to do, can count as a correct

---

[33] Robert 2004 suggests this kind of account of asking questions in a dynamic framework. It is a slightly different conception from that of Frege and Lewis, who conceive of the act as requests for an addressee to respond with the (correct) answer. See Frege 1918 and Lewis 1975.

[34] There can be variations on this conception of asking a question. Asking an exam question, for example, adopts the aim for a particular conversant to respond in a desired way.

[35] I am offering a variation of an influential approach to interrogatives, pioneered by Hamblin 1958, Kartunnen 1977, and developed by Higginbotham 1996, and Groenendijk and Stokhof 1994. Those authors conceive of a question as a set of propositions. I expand upon that notion, conceiving of a question as a set of alternative acts of answering.

answer to that question if it advises the agent to do the action that would be best in relation to the contextually provided goals.

Sec. 7.4: Normative Questions

This helps to explain normative questions of the form 'What should I do?' and 'Should I do X?', and thus to explain the data involved with the argument from questions and answers.

On my view, 'should' is suited for advising and it also implicitly elicits from context a set of alternatives, in the sense of available options for acting (e.g. that John goes to confession, that John does not go to confession). When an interrogative such as (33-Q), 'Should I go to confession?', is used to ask for advice, it presents these alternatives with advisory force and thus serves to create the adoption of a goal for an addressee to either advise one way or another. (I assume here for convenience that there is a speech-act of creating a goal.) The act of selecting one of these alternatives is a conversational move that suggests that option for acting as the one to choose. The answer can be formed as an imperative used to advise.

A normative question as a directive question	
(33-Q-dir) Should I go to confession?	GOAL[{ADVISE(p), ADVISE(~p)}]
(33-A1) No, don't go to confession.	ADVISE(p)
(33-A2) Yes, go to confession.	ADVISE(~p)

One can also ask (33-Q) in order to obtain information. Normative interrogatives like (33-Q), in which I assume the interrogative mood scopes over the normative clause 'should(p)', are both informational and directive questions, because the meaning of 'should(p)' is suited both for advising and asserting. The act of asking a question like (33-Q) thus can be used to make it desirable either that someone assert the true answer of {that it is best that J go to confession, that

it is best that J not go to confession} or that someone advise the best action of {that J go to confession, that J not go to confession}, or both.

A normative question as an informational question

(33-Q-inf) Should I go to confession? GOAL[{ASSERT(Best(p)), ASSERT(Best(~p))}]

(33-A3) Yes, you should go to confession ASSERT(Best(p))
(33-A4) No, you should not go to confession ASSERT(Best(~p))

The act of asking is simply the act of trying to make it desirable that someone select from the alternatives. Oftentimes, the act of asking a question leaves it implicit exactly what the alternatives are.

Section 8: Stalnaker's Contexts

The speech-act semantics I have sketched in this chapter borrows fundamental ideas from Lewis 1979a,b and Stalnaker 1978, regarding how to formalize an idealized version of an ordinary conversation. But my view also differs from theirs in several respects, and the comparisons provide an opportunity for me to develop my view further.

First and foremost, their projects aim to show what pragmatics can do. Both Lewis and Stalnaker were interested in improving the discipline of pragmatics by using the formal methods of semantics, as well as improving semantics through insights gained from pragmatic explanations. And it makes perfect sense to be interested in both directions of improvement, since semantics and pragmatics are charged together with the task of explaining how particular utterances are meaningful and understandable by audiences who know the words being used.

Although I broadly agree with their approach, the view I have been constructing is overtly semantic. It attempts to give an account of the conventional meanings of sentences, including the meaningful contribution of the sentence-moods, which turns out to involve language-use as well as semantic content. The biggest difference between my project and the projects in Lewis 1979a,b and Stalnaker 1978, is that they are showing how pragmatics can help truth-conditional semantics whereas I am introducing and explaining non-truth-conditional meanings, i.e. types of sentence-force. I am adapting some of their key insights for a semantic account that *expands* upon truth-conditional semantics. Recall that I take for granted that there are pieces of information, and I call upon propositions to play this role of content. Semantic content is an important part of sentence-meaning. It's just not all there is to it.

Some of the more important contrasts between the view of assertion I have been developing with Stalnaker's view of assertion pertain to how context is conceived. I conceive of context as a certain kind of abstract object, an organized grouping of the lists that together serve as a conversational record. The lists keep track of what is said in a conversation, what is publicly acknowledged, and what is commanded. More precisely, a list is a set of propositions, and a context is a pair of pairs of lists: <<AL, DAL>, <CL, DCL>>.

I agree with Stalnaker that a major purpose of communication is to convey information, and that context is a resource that facilitates this purpose. My notion of the acknowledgment-list is rather similar to Stalnaker's common-ground, and I also employ his notion of the context-set. But my employment of such notions differs from his in at least the following three respects.

First, Stalnaker 1978, 2002 defines the common-ground in terms of conversants' attitudes. The information in the common-ground is mutually presupposed by the conversants; it is the information that a speaker presupposes, and also presupposes that everyone else

presupposes, etc. In Stalnaker's view, presupposition is a propositional attitude. But it has the important role of explaining "the social and conventional character of the practice of communication", because it is an attitude directed at the attitudes of the other conversants.[36]

Even though Stalnaker means for the attitude of presupposition to be "public", in the sense of being directed at other conversants, and also in the sense of grounding "the field on which a language game is played" (2002, 720), it is still a private feature of an individual's psychology. So the context, which is publicly accessible to all the conversants, is determined by private attitudes which are not publicly accessible. This seems problematic to me. If the goal is to explain public communication using publicly accessible contexts, then we should not build such explanations on a foundation that cannot be publicly accessed.

I replace Stalnaker's notion of presupposition with my notion of *acknowledgment*. Acknowledgment is a publicly observable *act*. Actually, it's only an act in a weak sense in which even doing nothing can count as an act. Acknowledging that p is an act of letting the information that p be registered on the acknowledgement-list. One counts as acknowledging that p if (i) one witnesses in conversation a speaker attempt to add that p to the acknowledgement-list and (ii) one does not object. Acknowledging is the act of going with the flow of the conversation, of not raising an obstacle for its proceeding in that direction. Acknowledging is merely an outward sign of private acceptance and a defeasible one at that; someone can acknowledge that p without believing that p. What you acknowledge is fully public, and what you actually accept is private until you honestly share what you think.

[36] Stalnaker 2002, p. 720. Stalnaker is very explicit that "Speaker presupposition is a propositional attitude of the speaker…To presuppose something is to take it for granted, or at least to act as if one takes it for granted, as background information…what is most distinctive about this propositional attitude is that it is a social or public attitude: one presupposes that φ only if one presupposes that others presuppose it as well" (701).

This difference between our views reflects a difference in what we are using context to do. Stalnaker uses context to explain how an audience can understand what a speaker means in making an utterance, which fits into a broader Gricean picture in which communication involves the recognition of speaker intentions. Instead, I use context as a record of what happens in a conversation. It is as if there were a fully competent, fully attentive member of the conversation diligently taking notes. This ideal note-taker cannot see into the minds of the other conversants *and doesn't need to* in order to track the gameplay and score of the conversation. I would not use context alone to explain how to figure out speaker-meaning. In fact, I think that figuring out speaker-meaning in a particular conversation can be very difficult and imprecise, with the best clues being subtle facial features and subtle intonations of voice. Still, the things literally said and done in conversation are an important part of figuring out what was meant.

Our different conceptions of context also affect our conceptions of assertion. We both think that an assertion tries to change a context by adding information to it. But for Stalnaker this is essentially an attempt to change the psychological attitudes of the other conversants. On my view, the point of an assertion need not have anything to do with such things. An assertion that p is an attempt to add that p to the conversational record, regardless of how that will impact the mental life of one's conversants.[37]

[37] Here are some examples that support my side in this disagreement: (i) a speaker blurts out a sentence without thinking at all about communicating anything (perhaps it just popped into his mind), but he could be justifiably interpreted by a competent audience as having asserted that p, and so he *did* assert that p; (ii) a speaker asserts that p without intending to change her conversants' mental states, she even knows her conversants won't pay her any heed, but at least she got it on record that she asserted that p; (iii) a speaker with no one else around utters a sentence out loud, without trying to communicate with anyone, and thereby asserts that p. I also think that speaker intentions are unnecessary for performing determinate speech-acts. Even if a speaker does not understand the words he is using, if he utters a sentence that a competent audience can justifiably interpret as an assertion that p, then he asserts that p.

Second, Stalnaker 1978 claims that the context-set is more fundamental than the common-ground.[38] But I take the acknowledgment-list to be more fundamental, and use it to derive the context-set, via intersection.

Third, Stalnaker 1978 is careful to say that its proposed essential effect of assertion should *not* be taken as a *definition* of assertion. However, I am less careful than him on this matter. I say that an assertion is an attempt to ensure that its essential effect obtains in context, and that the assertion is successful just in case its effect does obtain. Therefore, I have to allow that an assertion can become successful even though no one asserted it, as a result of its content being mutually presupposed, or assumed, or any other way of being acknowledged. That seems fine to me, since I also distinguish between the success of an assertion and the *successful performance* of an assertion. The latter is an act of making an assertion successful by means of uttering a sentence and thereby adding its content to the acknowledgement-list. Also, I conceive of assertion as a generic type of act for which there can be specific variations.

Section 9: Lewis on Permission

Section 9.1: Lewis' problem about permission

I have articulated an account of the speech-acts of commanding and permitting that identifies them with conflicting changes in context. This approach is broadly patterned after David Lewis' proposed account in Lewis 1979a,b. In this section, I'm going to explain and critique Lewis' conception of these speech-acts, which is based on Stalnaker's account of

[38] Stalnaker 1978, p. 84 says that "the more fundamental way of representing the speaker's presuppositions is not as a set of propositions [i.e. common ground], but rather as a set of possible worlds, the possible worlds compatible with what is presupposed [i.e. context-set]." (The parenthetical additions are mine)

assertion. More importantly, I will suggest a solution to the problem about permission that he identifies.

Lewis explains the conflict between command and permission in terms of how those acts change a "conversational scorecard", which fits into his larger project in pragmatics that involves conceiving of conversations as language-games.[39] Lewis 1979a suggests that ordinary conversations are rule-governed, collective projects similar to games, and that the *context* of a conversation is analogous to the scorecard or scoreboard in a game such as baseball. Whereas a baseball scorecard keeps track of hits, runs, outs, etc., a conversational scorecard should keep track of all the significant parts of a conversation, e.g. what the conversants are taking for granted and which actions are permissible for them to undertake.

Lewis 1979b sets up a language-game in which there are two roles for the players: Master and Slave. Master tells Slave what to do, by commanding certain courses of action, and Slave obeys by doing everything he can to ensure the fulfillment of Master's commands. The game is thus a simplistic arena in which one agent can control the actions of another via the intermediary of a public language. The aim of constructing such a game is to learn something about the language and speech-acts that regulate conduct.

In order to further explain Lewis' problem about permission and how he conceives of the speech-acts of commanding and permitting, I'm going to construct a simple version of the kind of game that Lewis 1979b introduces, leaving out some details that won't matter for my purposes. Additionally, since it is unnecessary to conceive of the relevant social hierarchy as a relationship between Master and Slave, I'm going to substitute the relationship of Commander

[39] Of course, it is Wittgenstein who first proposed using the idea of language-games in order to think about the philosophical significance of *meaning* in its many forms. Lewis' project has a narrower goal of using the tools of formal semantics in order to better understand pragmatic issues such as presupposition accommodation. See Lewis 1979a for how he proposes to execute the project.

and Agent. It only matters that one player in the language-game be an official superior with the authority to tell the other, the official subordinate, what to do.

Commander changes what Agent is to do by changing the conversational score, as recorded on the scorecard. Agent knows what to do by checking the scorecard. The scorecard thus is a crucial intermediary that facilitates coordination of the two players in their collective project of playing the game. (Of course, they could have any number of further reasons for playing the game, e.g. building pyramids, making money, or trying to live as well as possible.)

The conversational scorecard includes a *sphere of permissibility*, which is a set of possibilities, each of which is a permissible way that the world could become. Commander's commands are registered onto the scorecard as restrictions on the sphere of permissibility. If Commander were to command that Agent works every day, then the sphere of permissibility would change so that each possibility remaining in that set is one in which Agent works every day. Presumably, this change would involve eliminating some possibilities that were permissible before Commander's command, namely every such way the world could become in which Agent does not work every day. Agent's task in the game is to ensure that the actual world itself remains a member of the sphere of permissibility. The core rules of the game are as follows:

1. *The Players' Roles*: There can only be two players, and each can only have one role. Commander has unquestionable authority to tell Soldier what to do, and Agent's only purpose is to obey Commander's commands.
2. *Moves that Players can Perform in the Game*: Commander can tell Agent what to do by commanding a proposition that involves Agent's potential actions, e.g. that Agent carries rocks all day. A command is given by uttering an imperative sentence, e.g. 'Agent, carry rocks all day!'.
3. *State of Nature assumption:* The game begins with everything permitted: the sphere of permissibility includes every world in the domain specified at the start of the game.
4. *Evolution of the Scorecard*: The sphere of permissibility at t is determined by the conversational history leading up to t. When a command is given, the proposition commanded is added to the current sphere of permissibility, thus ensuring that every world in the resulting sphere of permissibility is one in which the command is obeyed.

If these were all the rules, the game would be simple indeed. Such a game might seem rather boring, but at least it is perfectly clear how it works. The players' roles and the moves available to them are well-defined, and the course of the game is determined by such moves.

But the simplicity of this game belies its aim of accurately reflecting ordinary speech. Obviously, we will want to relax some of the rules, and add others, in order to make the artificial language-game more similar to what happens between ordinary speakers who want to coordinate their actions with one another. Of most relevance for my purposes is the issue of how to change the rules of the language-game so that Commander can *permit* Agent to do certain things.

It is easy enough to add to the second rule of the game:

2a. Commander can grant permission for Agent to act in certain ways by permitting a proposition involving Agent's potential actions, e.g. that Agent does not work on Saturdays. A permission is granted by Commander's uttering a permissive sentence, e.g. 'Agent may refrain from working on Saturdays'.[40]

But it is harder to change the fourth rule, so that it specifies how the sphere of permissibility will change as the result of permission being granted. This is the locus of Lewis' problem about permission: *How does an act of permitting change what is permitted?* Assuming Lewis' preferred conception of context, as involving a sphere of permissibility, the problem can be re-phrased: *Which possibilities are added into the sphere of permissibility by an act of permitting?* These questions turn out to be rather difficult to answer.

The problem arises for cases of what I call "partial permissions". For example, suppose Commander has already commanded that Agent carry rocks every day, but then later expressly permits that Agent take Saturday off. It would be incorrect to understand the later permission as

[40] Lewis doesn't give an example of a permissive sentence in English in either of his articles. I have chosen sentences in which the word 'may' occurs as the paradigm; it is an obvious choice, but I also have the further intention of eventually linking the meaning of deontic 'may' with the act of granting permission.

changing the conversation so that Agent is both permitted to take Saturday off and yet also required to carry rocks on Saturday. So, the later permission should be understood as canceling or otherwise changing the requirement created by the earlier command. But how? The problem is that we need a precise and principled account of how the earlier command is affected by the later permission, in order to specify exactly which possibilities are rendered permissible by the later act.

A natural first thought is that an act of permitting that p renders permissible every p-possibility. But that would allow for far too much. Amongst the possibilities in which it is true that Agent takes Saturday off are some in which Agent performs obviously wrong actions (e.g. stealing Commander's wine), some in which Agent usurps Commander's authority (e.g. by killing Commander), and even some in which Agent not only takes Saturday off but also every other day as well. Surely, Commander's permission didn't intend to allow for all that! Commander only meant to give Agent Saturday off, not to permit *anything* compatible with Agent's taking Saturday off. So, permitting that p doesn't render permissible *every* p-possibility.

Likewise, the effect of permitting that p cannot be to render permissible only *a single* p-possibility.[41] When Commander permits Agent to take Saturday off, Commander doesn't thereby direct Agent to realize a particular possibility. At the least, Commander's act of permitting leaves it open when Agent will take meals, take breaths, or blink, etc.

So, permitting that p should not be understood as adding *every* p-possibility into the sphere of permissibility, but neither should it be understood as adding only *a single* p-possibility. Issuing the permission renders permissible an appropriate number of possibilities in which Agent does not work on Saturday, without rendering them all permissible. The problem, again, is the need to specify which ones, and to do so in a principled way.

[41] Lewis himself makes these points. See Lewis 1979b, p. 169-70.

Lewis notes that his problem about permission arises for cases of partial permissions in the course of arguing against a response to his problem on which the conversational scorecard keeps a running list (L) of what is commanded:

> It is easy enough to provide for annulment of commands; the Master may at any time remove an item from the list (L), after which the Slave acts as if that command never had been given. But permissions are not, in general, annulments of particular past commands. A permission may partly undo several past commands, without fully undoing any of them. We need a device for integrating a succession of commands and permissions. A list with additions and deletions is one such device, but it is not flexible enough. The sphere of permissibility is meant to be a better device to serve the same purpose. (Lewis 1979b, 165; my underlining)

The notion of a partial permission can be sharpened. It is a product of how propositional entailment affects the conversational scorecard's evolution. An act of permitting that q, performed at t, is a *partial permission* just in case the conversational scorecard at t has registered a command that p, where the proposition that p is not identical with ~q yet entails that ~q.[42]

The idea is that Lewis' problem about permission only arises when there are commands registered on the scorecard whose contents entail the negation of the proposition that is later permitted. The later act of permitting cannot ensure that *some* q-possibilities are permissible if the earlier act of commanding continues to ensure that *only* p-possibilities, and thus *only* ~q-possibilities, are permissible. That Agent works every day entails that Agent works on Saturday, and so when Commander permits that Agent *not* work on Saturday, Commander can no longer consistently stand behind the previous command that Agent work every day. The problem, again, is that it seems obvious that *part* of the previous command should still be in effect, since, e.g., Commander didn't intend to affect what happens on any days except Saturdays.

[42] More carefully, this defines a *simple* partial permission. Another, more complicated case of a partial permission occurs when the scorecard at t has registered a series of commands of propositions whose conjunction (intersection) is a proposition that is not identical with the proposition that ~q yet entails that ~q, and then, after t, a speaker permits that q. I will address this complication in section 9.4.

The quote just mentioned from Lewis also raises another complication. A permission might jointly conflict with several prior commands without individually conflicting with any of them. This is another feature of Lewis' problem about permission that needs to be explained.

For example, suppose that Commander has commanded that Agent carry rocks every day, and also commanded that Agent dig holes every day, but then permits that Agent perform only one task per day. The only way for Agent to fulfill the two commands is to perform more than one task each day, and that is exactly what the permission allows Agent to refrain from doing. One of the commands must be changed or taken back, but neither one in particular must be changed or taken back, since we can assume neither has priority. The explicit material in Commander's utterances leaves some indeterminacy about how the scorecard changes.

Without more information, it would be arbitrary for Agent just to choose one of the commands to follow while disregarding the other. It would be equally arbitrary for Agent to carry rocks one day and then dig holes the next. Perhaps Agent is supposed to use background assumptions to figure out what to do. However, that could only help if the assumptions were explicitly stated or otherwise registered onto the scorecard at some prior point in the conversation, since the problem is the need to specify precisely how an act of permitting itself changes the scorecard. Moreover, it would surely be gratuitous for the rules of the game to specify that both commands are taken back or amended. But, then, which one?

In Lewis' words, it remains "unclear" how the scorecard will change in such a case.[43] But it is not only that Agent will be *uncertain* about he has been told to do, since there is genuine

[43] See Lewis 1979b, p. 174: "There are cases where it is really unclear which worlds have been brought into permissibility. That means that no principle can be both as definite as we might hope and clearly correct…" Lewis then describes an example that is slightly more complicated than the one I describe in the text. He concludes: "So a principle governing the evolution of permissibility cannot settle this case in a way that is clearly correct."

indeterminacy afoot.[44] Perhaps it is indeterminate how the scorecard will change. Or perhaps it can change in a determinate way that nevertheless registers some indeterminacy about what Agent is to do.

Lewis' problem about permission gives us two features of permission that need to be explained:

- Explain the difference between partial permission and complete permissions
- Explain what happens when a permission is issued that jointly conflicts with more than one past command without individually conflicting with any of them

Lewis' 1979b articulates the problem about permission without solving it. An adequate solution to the puzzle will need to explain what it is to permit, i.e. to perform the speech-act of granting permission. In particular, it will need to specify how a permission affects a conversation, including prior commands.

I will now draw out some more features of permitting that need to be explained, which will ultimately give us reason to reject part of Lewis' account of commanding and permitting.

Section 9.2: What it is to permit

There are several distinctive features that need to be explained by a fully general account of the act of permitting.

[44] Depending on how the scorecard is conceived of, uncertainty might itself yield genuine indeterminacy. Lewis 1979a, p. 344-6, explains how both a baseball scoreboard and a conversational scorecard might be conceived of in different ways. On one conception, there exists an authoritative scoreboard, e.g., the one in the baseball umpire's head, and thus if the umpire were uncertain about whether a run was scored then it is indeterminate whether the run was scored. More likely, however, the umpire would routinely form solid judgments on such matters, and thus there would never be a need for the score to be indeterminate. On another conception, the rules of baseball or the language-game could be regarded as "constitutive rules akin to definitions" (345), in which case the issue of indeterminacy needs to be settled, somehow or other, by the rules themselves. For the purposes of full disclosure, I am working with the latter conception of the conversational scorecard.

When it is required that p, it is therefore also permissible that p. No action could be required without also being permitted.[45] Yet, it is possible for an act of permitting to make it permissible that p without making anything required, and also without implying anything about whether it is permissible that ~p. That is what I call a case of a "mere permission". The minimal effect of an act of permitting is to merely permit, and so any account of what it is to permit needs to explain what it is to merely permit.

At any point in a conversation, a speaker with the relevant kind of authority to tell an agent with to do can grant permission for the agent to act in a certain way. A use of 'You may…' by such an authoritative speaker is sufficient. The only contextual set-up required for an act of permitting is that the speaker has the relevant authority. So, in particular, it is possible for the conversation to begin with a permission. For example, you've just walked into your boss' office and sat down when your boss says 'You may smoke', thus granting permission for you to smoke. That can make sense even though you weren't commanded not to smoke, before the permission was given. I will use the phrase 'prior permission' to designate an act of permitting that is performed before any commands which might conflict with it are performed.

Such a prior permission changes the conversation in a distinctive way, by leaving a standing resistance to any commands that would require otherwise. This can be seen in an example involving a hierarchy of authority. If your boss' boss has permitted you to smoke, then your boss cannot command you not to smoke unless your boss can get your boss' boss to take back the original permission to smoke. An act of permitting creates an obstacle that protects certain possibilities from being rendered impermissible by future commands. Those possibilities

[45] Although it makes more sense to talk about an action being permitted, as opposed to a proposition being permitted, I will often use the latter way of speaking. Permitting (or commanding) the proposition that Agent smoke should be understood as permitting (or commanding) that Agent see to it that Agent smokes. In all of the examples I will consider, the proposition permitted or commanded will involve an agent.

that have been expressly permitted have a *protected status*, albeit one that can be overridden, that is not had by other permissible possibilities which simply have not been the object of a command or permission.

A similar point also holds for commands. If your boss' boss has commanded you not to smoke, then your boss cannot permit you to smoke unless the original command is somehow overridden or changed so as to make an exception for you to smoke. The antagonistic relationship between acts of commanding and permitting is *symmetrical*; the successful performance of one leaves an obstacle to the success of future performances of the other, when they pertain to doing or not doing the same actions.

The hierarchy of authority helps to illustrate the conflict between permissions and commands, but it is inessential. Two superiors with equal authority, or even a single speaker who changes her mind, could also make the point. When no one in the conversation has yet addressed whether or not to make it the case that p, a command or permission that p moves the conversation forward by passing judgment on that issue. But when it has already been permitted that ~p, a command that p reverses course as well as moving forward. Likewise, when it has already been commanded that ~p, a permission that p reverses course as well as moving the conversation forwards. Such a reversal of course reflects a change of mind or disagreeing judgments about whether to make it the case that p, something which goes beyond merely adding another judgment to the conversation. Amongst all the possibilities in play, those that have been expressly permitted need to be distinguished from those that simply have not been addressed, and the distinction of being permitted bears a relationship of conflict to the distinction of being commanded.

The points I have been making here can be summarized as desiderata to be explained by an account of what it is to permit. An adequate account needs to

- Explain what it is to "merely permit" a course of action without also requiring it
- Explain the significance of a "prior permission" which is performed before any commands it conflicts with have been performed
- Explain how a permission leaves an obstacle for, and thus standing resistance to, any future commands that would forbid what it permits, and vice versa for commands (the conflict between commanding and permitting is *symmetrical*)
    - Distinguish those possibilities that have been expressly permitted or commanded from those that simply have not been addressed

This final desideratum really breaks into two parts: something needs to distinguish those possibilities that have been expressly permitted from those that are permissible simply because they haven't yet been addressed, and the judgments that distinguish possibilities as expressly permitted or as commanded need to be understood as bearing a symmetrical relationship of conflict.

Section 9.3: Pros and cons of Lewis' account of permitting

Although Lewis doesn't try to solve his problem about permission, Lewis 1979b makes progress both by serving to articulate the problem and also to set up a formal framework in which permissions and commands can be accounted for together.

It is only natural that permissions should be accounted for together with commands. In Lewis' set-up, an act of commanding renders certain possibilities impermissible, by *removing* them from the sphere of permissibility; commands are thus essentially related to what is permitted. An act of permitting, on the other hand, tries to ensure that certain actions are permissible, and it thus tries to expand the sphere of permissibility by *adding* possibilities to it.

This duality of permitting and commanding is an elegant feature of Lewis' account, and it is one that I will preserve in my own account.

Since commands are the only way of rendering a world impermissible in Lewis' game, an act of permitting is thus a way for Commander to take back or change what she has previously commanded. In fact, given the 'state of nature' assumption according to which everything is permitted at the beginning of the game, the *only* reason for issuing a permission in Lewis' language-game is to reverse course on a previous command.

But this last implication is an undesirable feature of how Lewis conceives of the relationship between commanding and permitting. It implies that what I called "prior permissions" are nonsensical. For example, a permission issued in the state of nature is not only pointless, it doesn't change the context at all and thus is insignificant. Even if we jettison the state of nature assumption, a prior permission that is issued before the issuing of any commands it conflicts with won't change context in any way and thus won't have any significance.

Additionally, Lewis' account makes the conflict between permissions and commands asymmetrical, since a permission in his game doesn't leave any obstacle or standing resistance to future commands. In fact, the possibilities rendered permissible by an act of permitting are not distinguished in any way from other possibilities which are permissible simply because they have not yet been eliminated by any commands. Recall the example given before involving a hierarchy of authority. If your boss's boss has permitted that you smoke, then your boss (a) should be able to know that in virtue of checking the context, and (b) shouldn't be able to command you not to smoke unless first somehow un-doing the permission of your boss' boss'. But given what Lewis says about permission, neither of these points holds.

So, there are good reasons to seek an alternative solution to the problem.

Section 9.4: My account of permitting and how it solves the problem about permission

My proposal for what it is to permit satisfies each of the desiderata that I have articulated in bullet-points. As I conceive of it, an act of permitting is a bona fide speech-act on the same level as commanding and asserting – it is not merely a way to take back a command, as Lewis' account would have it. Nevertheless, permitting has a special, symmetrical relationship with commanding, such that the two acts must be defined together. I define an act of permitting as an act of *disputing a command*, although I could equally well have defined commanding as an act of disputing a permission.

In particular, in addition to the command-list (CL) I posit another component of context that is naturally paired with it: the disputed-command-list (DCL). The part of context that registers what agents are to do is divided into these two lists, which I represent formally as a pair of sets of propositions: <CL, DCL>.

Just as the purpose of the command-list is to record successful acts of commanding, the purpose of the additional list (DCL) is to record successful acts of permitting, and thereby to explain how it is that acts of permitting leave an obstacle to future commands that would forbid what has been permitted. DCL could be thought of as a permission-list, except that doing so would make it confusing how negation is involved. A permission that p conflicts with a command that ~p. So, I define the act of permitting that p as the act of disputing the command that ~p. This lets me describe the two conflicting acts with respect to the very same propositional content.

The effect of permitting that p, i.e. disputing the command that ~p, is to remove the proposition that ~p from the command-list (CL) *and add it* to the disputed-command-list (DCL).

This act of taking an item off of one list and adding it to the other is what I call an act of *disputing*. Permissions dispute commands in the very same way that commands dispute permissions. The effect of commanding that ~p is to remove the proposition that ~p from DCL and add it to CL. In this way, the effects of permitting and commanding are symmetrical.

If an act of permitting that p is a prior permission, then its only noticeable effect on the scorecard is to add that ~p to DCL. But if it has been commanded that ~p, then the act of permitting that p both cancels that command and also adds that ~p to DCL. For example, suppose that Commander has already commanded that Agent sit down, and so there is a requirement registered on CL that Agent sits down, as in (34) below. Commander can change her mind and take that back by issuing a permission that Agent not sit down; the effect this has on context is to remove the proposition that Agent sits down from CL and add it to DCL, which results in a context as specified in (35). This is a context in which it is merely permitted that Agent not sit down.

(34) <{that Agent sits down…}, {…}>
(35) <{…}, {that Agent sits down, …}>

If Commander changes her mind again and wants to take back the permission to reinstitute the earlier requirement, she can simply issue the original command again; the effect this has on context is to remove the proposition that Agent sits down from DCL and add it to CL, changing the context from its state represented in (35) back to the state represented in (34).

No single proposition could simultaneously be a member of CL and also DCL. That's mandated by the success-conditions of the acts of commanding and disputing a command; if one act successfully changes context as it tries to, then the other act is guaranteed to be unsuccessful

in changing the context as it would have it. This explains the conflict between commanding and permitting: they dispute each other.

An act of permitting leaves an obstacle to future commands by means of adding a proposition to DCL. Once that p is on DCL, the command that p is guaranteed not to be successful, unless it removes it from DCL. A command that p leaves an obstacle to the permission that ~p, in the same way.

The sphere of permissibility is the result of conjoining (intersecting) all the propositions in CL; it is the set of possibilities in which all requirements are fulfilled.[46] So, if contradictory commands were issued that added propositions to CL that contradict each other, the sphere of permissibility would be empty and there would be no permissible options for Agent. That would be a deontic dilemma, as in (36) below: Agent will violate a requirement no matter what he does. That's very different from the result of both permitting that p and also permitting that ~p, which would add the proposition that p and also the proposition that ~p to DCL (while removing them from the command-list if they were there), as in (37) below. Having contradictory propositions on DCL doesn't limit which possibilities are permissible; in fact, the result would be a sphere of permissibility that is guaranteed to involve some possibilities in which it is true that p and other possibilities in which it is true that ~p.

[46] Since the sphere of permissibility can be derived from the command-list, my preferred account can match every explanation that Lewis gives using his sphere of permissibility. In particular, I can explain the effects of commanding and permitting in terms of how they change the set of permissible possibilities, even though that change is derivative from a change in the command-list. Notice, though, that the set of propositions that have been commanded in the conversation (the command-list) cannot be derived from the sphere of permissibility: a given set of permissible possibilities could have been the product of any number of incompatible conversational histories. So, the command-list is more informative about what has happened in a conversation than the sphere of permissibility is, because of its additional structure. Moreover, the extra structure in the command-list serves an important purpose. We need to be able to separate which requirements conflict with a new permission. Suppose that Commander has commanded that Agent not steal his wine, and also commanded that Agent work every day, before permitting that Agent not work on Saturday. Obviously, the later permission doesn't make it permissible for Agent to steal Commander's wine on Saturday, and that is easily explained using a command-list since the later permission only conflicts with one of the earlier commands. The requirement that Agent not steal Commander's wine is not affected at all. Lewis' preferred account, which doesn't involve a command-list, cannot explain it in that way, and in fact his article leaves the issue unexplained.

(36) <{p, ~p, …}, {…}> (deontic dilemma resulting from contradictory commands)
(37) <{…}, {p, ~p, …}> (no conflict)

The state of context represented in (37) is one in which it is merely permitted that p and also merely permitted that ~p: there are no requirements as to whether Agent is to make it the case that p or that ~p. This state can be used to explain a state of indifference, as long as there is no additional value- or preference-ranking of the p-possibilities and the ~p-possibilities.

Finally, I will now respond to Lewis' problem about permission using this framework. A partial permission is an act that tries to permit some proposition whose negation is entailed by (yet not identical to) a proposition that is a member of CL, i.e. entailed by (yet not identical to) a requirement. For example, suppose that the state of the language-game is represented in (38) below, in which Commander has already commanded that Agent is to work every day, and that Commander is about to (partially) change her mind and permit Agent not to work on Saturday.

(38) <{that Agent works every day,…}, {…}>
(39) # <{that Agent works every day, …}, {that Agent works on Saturday, …}>

Obviously, if the permission is issued, then the requirement that Agent is to work every day cannot remain on record. If it did, that would be a situation, as represented in (39), in which some possibilities are both permitted and also forbidden, because they are ensured to be both in and not in the sphere of permissibility, which is absurd. The same reason that prevents a single proposition from simultaneously being a member of both CL and DCL also prevents having some proposition on CL and some other proposition which it entails on DCL. So, an act of disputing a command that p is itself, at least implicitly, an act of disputing the command of any other proposition that entails that p.

Therefore, the nature of the conflict between a partial permission and the command it conflicts with is *the same in kind* as that between a complete permission and the command it conflicts with. In each case, it is impossible for both the permissive act and the commanding act to successfully change the context in the ways they try to change it, and the question of whether such a speech-act is successful in its attempt to change context is all-or-nothing. A command is either successful or it is not, and both the partial- and complete-permissions that conflict with it are sufficient to guarantee that it is not successful.

But if the requirement that p is simply taken off the conversational record, then doesn't that allow for too much? That would treat a partial permission as having the same effect on the sphere of permissibility as a complete permission.

In response, I affirm that a partial permission and a complete permission have the same effect on the sphere of permissibility, and I question the claim that that allows for too much. The intuition that it does allow for too much stems from the assumption that Commander *intends* only to change the context with respect to what happens on Saturday. That claim was included in the description of the scenario, although it also could have simply been a reasonable assumption to make. Yet, it should be explicitly recognized as just that: an *additional* assumption, one which is true in normal cases of issuing such a permission but which is *not itself* part of what it is to permit that Agent not work on Saturday. Commander's private intentions should not themselves be a determining factor of the effect of Commander's public act of issuing a permission. It is unnecessary for Commander to have the intention for Agent to work every day besides Saturday. For example, Commander might intend for Agent either to work every day or not to work for her at all. There's nothing incoherent about adding that extra detail to the conversation, and so Commander's act of permitting Agent not to work on Saturday doesn't

necessitate her having the intention only to change what Agent does on Saturday. The effect on context produced by the act of permitting depends on what the context is like and what permission is, but not on any covert assumptions about Commander's intentions. The original intuition that partial permissions do not fully disagree with the relevant command is simply misplaced, since it makes unwarranted assumptions about the intentions of the speaker issuing a partial permission.

I grant that, in normal circumstances, a speaker who issues a partial permission does not intend to completely erase the requirement that it conflicts with. That's presumably why the speaker issues a *partial* permission rather than a complete permission, which the speaker could have done instead and chose not to. However, recall that the problem raised by Lewis has greater generality. One has to say what it is to permit, in order to solve it, i.e. amend one of the rules of the game so as to specify how an act of permitting changes the context. We shouldn't program the normally intended result into the rules of the language-game, which would effectively render non-normal circumstances impossible.

Also, even if a speaker who issues a partial permission doesn't normally *intend* to create the effect of issuing a complete permission, that effect is *preventable.* Commander could re-issue a more qualified version of the original command immediately after issuing the permission for Agent to take Saturdays off. Moreover, it is the responsibility of the players in the language-game to change the context how they want to. It is not the fault of the rules of the language-game if the players use it unskillfully, or play it poorly as evaluated by their own goals and intentions. Commander has both the ability and the means to clarify exactly how she wants to change the conversational context, and Commander is the only one who can do that.

It is useful to compare the case of partial permission to the partial retraction of an assertion. Suppose that you say to me that you have been watching Agent rather closely, and you assert that Agent works every day. If I respond by saying, 'No, I saw Agent sleeping under a tree all day on Saturday', then I have refused to accept what you said, and indeed I have overtly disagreed with your utterance. Perhaps the normal response from you would be to qualify your assertion, so that you only commit yourself to the claim that Agent works every day except for Saturday. But, again, even if that is the normal response, it seems like you have to make that qualification publicly; an interpreter who is ignorant of your intentions would be going beyond what we said to each other in our initial exchange if she were to understand my response as merely making an exception to your assertion rather than outright disagreeing with it. Also, it is not obvious that your response should be to issue the second, qualified assertion; perhaps your response will be to doubt whether it really was Agent that you've been observing.

My proposed view certainly can distinguish partial and complete permissions in terms of their effects on context; they add different propositions to DCL, and thus ensure the permissibility of different actions. They leave different kinds of obstacles. But their effect on the sphere of permissibility is the same, since they both disagree in the same way with the commands they dispute.

While that covers the case of partial permission, there still remains the question of how to handle the "unclarity" or indeterminacy that apparently results from a permission that jointly conflicts with a subset of earlier commands without individually conflicting with any of them in particular. To explain such cases, I will specify a determinate way for the context to be changed which nevertheless preserves the intuition that some indeterminacy is produced in the conversation.

Recall the scenario used to illustrate the problem. The context has already registered two commands, that Agent carry rocks every day and that Agent dig holes every day. So, the context is in the state represented in (40) below, but then Commander issues a permission for Agent to perform only one task each day. The new permission conflicts with the state of the context represented in (40), since adding the permitted information, as in (41), would create a situation in which some possibilities are both permitted and forbidden, because they are ensured to be both in and not in the sphere of permissibility, which is absurd. The question remains: what effect does the permitting have on the context?

(40) <{that A carry rocks, that A dig holes,…}, {…}>
(41) # <{that A carry rocks, that A dig holes,…}, {that A not perform only one task,…}>

As I explained in my account of partial permissions, a dispute of the command that p is also, at least implicitly, a dispute of any commands of propositions that entail that p. This point also applies to the case of present concern where there is no individual command that conflicts with the new permission, but rather there is a set of earlier commands that collectively conflict with the new permission. The new permission is an act of disputing that entire set of commands.[47] Since I have only explained the act of disputing when it applies to a single command, I now need to explain what it is to dispute more than one command at once without disputing any of them individually.

At this point, I am going to complicate the structure of the conversational scorecard. Up to now, I have proceeded as if the abstract object I identified as a context, i.e. a certain tuple such

[47] More particularly, what is disputed is the *minimal* set, such that every command that is necessary to produce the conflict is a member of that set and nothing else is a member of that set. If you find it awkward to talk about disputing a *set*, as opposed to a collection or group of speech-acts, then feel free to substitute your preferred terminology. It is the speech-acts themselves, conceived of as a collection, which are disputed, rather than the abstract object that has them as members.

as the one in (40), exactly matches the structure of the conversational scorecard which keeps track of the commitments of a conversation. But these come apart precisely for the cases of unclarity at hand. In normal cases, where there is no such unclarity, the conversational scorecard is simply a singleton set of a context. But the cases of unclarity are precisely situations in which the scorecard comes to include more than one possible context, each of which are candidates for representing the commitments of the conversation.

Let's focus on the scenario described a moment ago, with one small addition. The commitments of the conversation are represented in (42), with three commands successfully recorded: that Agent work every day, that Agent dig holes every day, and that Agent not kill Commander. Then, Commander issues a permission that Agent perform only one task each day. The effect of this permission is to multiply the number of candidate contexts; there is a new context for each way of resolving the unclarity that is produced by Commander's new permission. After the new permission is successfully issued, but before any clarification is added, the scorecard now comes to include the set represented in (43).[48]

(42) { <{that A carry rocks, that A dig holes, that A not kill C,…}, {…}> }
(43) { <{that A carry rocks, that A not kill C,…}, {that A not perform only one task…}>,
<{that A dig holes, that A not kill C…}, {that A not perform only one task…}> }

What does it mean to say that the conversational commitments, as modeled on the scorecard, includes more than one candidate context? It means that there is some indeterminacy involved with the commitments. But notice that it remains completely clear that Agent is required not to kill Commander, and also that Agent is permitted to perform only one task each day, because those are features of every candidate context. The new permission is successful, by

[48] The quantifiers can be left out, for simplicity of representation, as long as it is understood that the propositions all tacitly begin 'For every day…'.

hypothesis, and its success doesn't affect the status of any requirements on record that are not part of the minimal collection of prior commands that conflicts with the new permission. There are two ways to erase one of the prior commands, and this determines the character of the two candidate contexts in (43).

What is Agent required to do in a conversation whose commitments are represented as in (43)? In addition to not killing Commander, Agent is either required to carry rocks every day or Agent is required to dig holes every day, and it is indeterminate which of these requirements is recognized in the context. Given such indeterminacy, it is not true to say that Agent is required to dig holes every day, since there is a way of clarifying the commitments of the conversation, *without adding* any commitments, in which Agent does not dig holes in every permissible possibility. Yet it is also not true to say that Agent is not required to dig holes every day, since there is a way of clarifying the commitments, again without adding to them, in which Agent *does* dig holes in every permissible possibility. The status of the effect of each previous command is still that of a requirement, but it becomes indeterminate which requirements are still recognized in the conversation. The relevant unclarity is precisely a kind of indeterminacy about the requirements recognized in the conversation. One of the previous commands is rendered unsuccessful by the new permission, and it is determinately either the command that Agent carry rocks every day or else the command that Agent dig holes every day that is taken back, but it is indeterminate which of those commands has been implicitly taken back by the new permission.

In this way, I propose to retain Lewis' insight that such indeterminacy or unclarity is a necessary feature of the language-game, while specifying a determinate rule for how an act of permitting changes context. One might disagree with Lewis and think that it is a "bug" that such indeterminacy *could* ever obtain. But, remember, it is not the fault of the game, rather it is the

fault of the players, if it ever does obtain. Commander has at her disposal the means of resolving the indeterminacy, and there is never a necessity for it to be produced in the first place. This remains true even if we were to alter the first rule of the game so that there can be multiple commanders who can disagree with each other about what Agent is to do. The commitments of a conversation only can become indeterminate through the actions (whether intentional or not) of speakers. They are the only agents of change in the language-game.

Conclusion

This chapter has begun constructing a theory of normative language that can explain its distinctive connections with imperative sentences. Deontic modals can adorn declarative sentences with the meanings of imperative sentences.

So far, I have only addressed simple normative sentences such as 'John must be here in ten minutes'. In the next chapter, I will address complex sentences in which simple normative sentences occur as constituent clauses. The details provided at the end of this chapter in response to Lewis' problem about permission will turn out to have important implications for addressing complex sentences such as disjunctions.

Interrogative sentences, too, fit into the theory and share in the dual communicative purposes of exchanging information and coordinating action. The details provided in section 7 about advice, goals, and questions need to be developed further, but unfortunately that is not where the next chapter is headed. In the next chapter, the theory begun here will be extended to account for the meanings of complex sentences compositionally. Also, the speech-act theory will be compared with the attitudinal theory of expressivism.

Chapter Three

Complex Sentences and Compositional Semantics

Chapters one and two argued for a certain type of nondescriptivist theory of normative language: a view on which the conventional meanings of deontic modals suit them for specific types of imperatival speech-acts. This chapter will further develop this theory by showing how the meanings of complex sentences are determined compositionally from the meanings and arrangement of their parts. The main focus of this chapter is to respond to a principled, fundamental critique of the nondescriptivist semantic project, according to which it is impossible to develop such a compositional theory.

The critique was initiated half a century ago by Peter Geach and John Searle. It has come to be called "the embedding problem", because it centers on how simple normative clauses embed into more complex sentences. It is also called "the Frege-Geach problem", because of Geach's attempt to credit the point to Frege. But I think that's a misnomer because it's not obvious that Geach's attempt to refute nondescriptivist semantics with what he calls "the Frege point" is something that Frege would agree with. I will respond to Geach's critique with a theory built upon a foundation of Fregean ideas.

I'll explain the general challenge for nondescriptivism in section 1. Then, in section 2, I'll examine the details of the more particular challenge involved with negation, as it has been raised for expressivist versions of nondescriptivism. In section 3, I'll explain how the speech-act theory that I defend responds to the challenge and avoids the kinds of problems that plague expressivism. Then, in section 4, I will look more closely at the expressivist theory developed in Gibbard 2003, both in order to diagnose what leads it into problems with negation and also to suggest how it could be changed in order to imitate the speech-act theory's response to the negation problem. It seems to me that even expressivists have options for responding to the challenges facing them, although their distinctive approach to theorizing about language makes it more difficult for them to do so.

Then, I leave expressivism behind and focus on developing a compositional speech-act theory of the meanings of complex sentences that can have both declarative and imperative sentences as constituent clauses. Section 5 gives details about conjunction and disjunction, both for propositions and for speech-acts. Section 6 explains how one sentence can follow from another, given that their meanings are accounted for in terms of the characteristic speech-acts they are suited for.

Finally, in section 7, I explain how normative sentences can occur as parts of more complex sentences and how they can be the conclusions of valid inferences. This constitutes a response to the fundamental critique of nondescriptivist semantics, offered by Geach amongst others, which uses complex sentences and valid inferences to claim that such a project is hopeless.

Section 1: "The Frege-Geach problem"

Geach's and Searle's original objections were aimed at Hare's theory of the word 'good', amongst other targets, because Hare 1952 claimed that the speech-act of commending was somehow part of the *meaning* of 'good', rather than simply reflecting a pragmatic fact about how speakers use 'good' to commend. Geach and Searle showed how 'good' can occur in un-asserted contexts, such as interrogative sentences, negated sentences, and conditionalized sentences, and how those sentences are not typically used to perform acts of commending at all. Geach thought that Hare must say that the occurrences of 'good' in (2), (3), and (4) do not mean the same thing as the occurrence of 'good' in (1), because even if (1) is commendatory the others are not.

(1) This is good.

(2) Is this good?
(3) This is not good.
(4) If this is good, then the audience will be pleased.

Geach further argued that the occurrences of 'good' in (1) – (4) *have to* mean the same thing, because there clearly are certain semantic relations holding between them: (1) is an *answer* to the question posed by (2), (1) is *inconsistent* with (3), and (1) can be put together with (4) to deliver the conclusion that the audience will be pleased, as part of a *valid inference*.

Geach appealed to ideas articulated by Frege in order to diagnose the problem for nondescriptive views like Hare's. Geach claimed that nondescriptivists failed to fully appreciate Frege's distinction between *force* and *content*. According to him, 'the Frege point' refuted

Hare's theory and other versions of speech-act semantics.[49] Geach appears to reason in something like the following way:

(5) 'good' occurs with the same meaning in each of (1) – (4),
(6) but the clause in which 'good' occurs is not asserted in (2) – (4), and that is why
(7) the clause in which 'good' occurs in (2) – (4) is not commendatory, and therefore
(8) the meaning of 'good' does not include commendatory force.

But it is not obvious that Frege would agree with this kind of reasoning. If Geach's argument were cogent, then force could not be part of the meaning of *any* sentence that can occur as a constituent clause in a more complex sentence, where that clause is not put forward with that force. Yet Frege's distinction between force and content appears to imply that force is a meaningful feature of sentences that can occur in more complex sentences without being put forward with such force.

In his foundational logical works, Frege distinguished what is asserted, a Thought, from the act of assertion, which involves showing that the Thought is true. This distinction was implemented in his early *Begriffsschrift* (1879) by the fact that its sentences were prefaced with both a vertical stroke, signifying the act of judging or asserting, and also a horizontal stroke that introduced the content of what is judged or asserted to be true. The details of this distinction are

[49] Geach wrote: "This whole subject is obscured by a centuries-old confusion over predication embodied in such phrases as "a predicate is *asserted of* a subject". Frege demonstrated the need to make an absolute distinction between predication and assertion; here as elsewhere people have not learned from his work as much as they should. In order that the use of a sentence in which "P" is predicated of a thing may count as an act of *calling* the thing "P", the sentence must be used assertively; and this is something quite distinct from the predication, for, as we have remarked, "P" may still be predicated of the thing even in a sentence used non-assertively as a clause within another sentence. Hence, calling a thing "P" has to be explained in terms of predicating "P" of the thing, not the other way around. For example, condemning a thing by calling it "bad" has to be explained through the more general notion of predicating "bad" of a thing, and such predicating may be done without any condemnation; for example, even if I utter with full conviction the sentence, "If gambling is bad, inviting people to gamble is bad", I do not thereby condemn either gambling or invitations to gamble, though I do predicate "bad" of these kinds of act. It is therefore hopeless to try to explain the use of the term "bad" in terms of non-descriptive acts of condemnation..." (Geach 1960, 253, my underlining).

important and yet rather subtle. In Frege's later work "Thought", he had more to say about the distinction.

> An interrogative sentence and an assertoric one contain the same thought; but the assertoric one contains something else as well, namely assertion. The interrogative sentence contains something more too, namely a request. Therefore two things must be distinguished in an assertoric sentence: the content, which it has in common with the corresponding propositional question; and assertion. The former is the thought or at least contains the thought (Frege 1918, 329, my underlining).[50]

> We express acknowledgement of truth in the form of an assertoric sentence. We do not need the word 'true' for this. And even when we do use it the properly assertoric force does not lie in it, but in the assertoric sentence-form; and where this form loses its assertoric force the word 'true' cannot put it back again (Frege 1918, 330, my underlining).

In these quotations, Frege clearly distinguishes "assertoric" sentences from interrogative sentences in terms of assertive and requestive force. These types of sentence can have the same content. And the assertive force in an assertoric sentence "lies in" the assertoric sentence-form.

Thus, Frege thought that force is a feature of a sentence, and that force comes from the form of a sentence. He also recognized that such sentences can occur as constituent clauses without being put forward with assertive force.

> We need to be able to express a thought without putting it forward as true. In the Begriffschrift I use a special sign to convey assertoric force: the judgement-stroke. The languages known to me lack such a sign, and assertoric force is closely bound up with the indicative mood of the sentence that forms the main clause. Of course in fiction even such sentences are uttered without assertoric force; but logic has nothing to do with fiction. Fiction apart, it seems that it is only in subordinate clauses that we can express thoughts without asserting them" (Frege 1906, 198, my underlining).[51]

While the points I've been drawing out of these quotations do not precisely contradict Geach's style of argumentation, they do suggest an alternative view on which a sentence's force is one of its intrinsic features that nevertheless is sensitive to the sentential environment in which that sentence occurs. The "form" of a sentence gives it force, and it retains this form even when it occurs embedded in a more complex sentence without being put forward with that force.

---

[50] Page numbers refer to the reprint in the Beany reader

[51] This quotation comes from "A brief survey of my logical doctrines", which are revisions of diary notes. Page numbers refer to the Beany reader.

Searle's presentation of "the speech act fallacy" raised similar issues as those raised by Geach, and additionally considered a possible way that Hare might respond (Searle 1969, 136-141). Searle's idea is that if (1) meant the same as (1a), then (2) might be said to mean the same as (2a), (3) as (3a), and (4) as (4a). However, Searle concluded pessimistically that this idea is implausible as an account of the meaning of 'good'. For example, it makes perfect sense that I might commend something that is actually not good; there is no inconsistency between (1a) and (3). Also, it doesn't follow from (4) and (1a) that the audience will be pleased.

(1) This is good.
(1a) I commend this.

(2) Is this good?
(2a) Do I commend this?

(3) This is not good.
(3a) I do not commend this.

(4) If this is good, then the audience will be pleased.
(4a) If I commend this, then the audience will be pleased.

Hare 1970 responded to this critique in a defensive way. Hare argues that the meaning of, e.g. (3), could be explained compositionally by the meaning of 'not' and the meaning of (1), which involves the speech-act of commendation, and by the fact that 'not' scopes over (1). In other words, the speech-act semantically assigned to (2) as its meaning can be determined as a function of the meaning of 'not' together with the speech-act semantically assigned to (1). This is a defensive response, because it doesn't actually construct the compositional semantics, it instead claims that it could be done.

Hare 1970 also claims that there must be some way of compositionally determining speech-act-meanings, since there are paradigmatic ways that linguistic convention encodes

speech-act significance in natural language which don't threaten the principle of compositionality. His examples include the performative verb 'promise', as it might occur in the sentence 'I hereby promise to pay you back tomorrow', as well as "the sign of indicative or imperative mood" (p. 6). Hare claims that 'promise' is semantically related with the speech-act of promising, and that the indicative mood has a semantic relation to the speech-act of assertion.

Of course, it is not *sentences* that perform speech-acts; it is *speakers*. So, in claiming that 'promise', 'good' and the indicative mood have speech-act meanings, Hare's view should not be interpreted as claiming that those words themselves perform speech-acts (nor that the sentences they occur in do so). Instead, there is a semantic relation, that holds because of the linguistic conventions governing the words and sentences, that relates such expressions to speech-acts that they are especially suited for being used to perform.[52]

Hare's response is abstract. It leaves the constructive task of actually explaining how to assign speech-acts to sentences as their meanings, in a compositional way, for someone else.

I find the outlines of Hare's response plausible, and I take up the project of filling it out in this chapter. The result might not be exactly what Hare would want, but it does validate several of his ideas. And it will show that Geach was mistaken to think that Frege's distinction between force and content poses a problem for nondescriptivism. In fact, my compositional system is inspired by Frege and his distinction between force and content.

But we still have yet to see exactly what such a task must accomplish in order to succeed. Since the original debate began, the problem has become more sharply focused, especially with respect to the case of 'not' and negation.

---

[52] Hare 1970, p. 7, makes this point for the moods: "Any complete explanation of the meaning of a verb occurring in a sentence must explain the meaning of its mood…and it is hard to see how this could be done otherwise than by specifying the kind of speech act to which that mood is assigned by the conventions which constitute our language. To be in a certain mood is to be assigned to the performance of a certain genus of speech acts."

Section 2: The Negation Problem for Expressivism

The negation problem has been developed especially well against *expressivism*, which is the version of nondescriptivism championed by Simon Blackburn and Allan Gibbard. In this section, I will explain expressivism's problems with negation, which will help show what needs to be done to solve or avoid them. In section 3, I will show how my preferred version of nondescriptivism, the speech-act theory whose construction was begun in chapter two, avoids the problems that plague expressivism.

Section 2.1: The Expressivist Project

Expressivism takes a distinctive approach to the semantics of normative sentences. The meaning of a normative sentence is explained in terms of the attitude it expresses.[53] More particularly, (i) a normative sentence expresses a noncognitive attitude, (ii) in the same sense of 'express' in which an ordinary declarative sentence expresses a belief, and (iii) this specifies normative sentence-meaning.

Expressivists have tried to claim that the major difference between them and their opponents is at the level of thought, and not at the level of language.[54] After all, who would deny that ordinary declaratives express beliefs? So, there must be an expression-relation, holding between sentences and mental states or attitudes, and the distinctive claim of expressivism is about which kind of mental state or attitude is associated with normative sentences.

---

[53] "The term 'expressivism' I mean to cover any account of meaning that follows this indirect path: to explain the meaning of a term, explain what states of mind the term can be used to express" (Gibbard 2003, 7).

[54] Gibbard 1990 says "that words express judgments will, of course, be accepted by almost everyone" (84).

However, claim (iii) involves a distinctive and controversial claim about sentence-meaning, which has been helpfully articulated in Schroeder 2008a,c. The corresponding claim for an ordinary declarative sentence is that its meaning is specified by the belief that it expresses. But this is to treat the mental state or attitude as the semantic value of the sentence; the sentence is only derivatively associated with its propositional content because its semantic value is an attitude with that content. For example, 'Jim will turn himself in' expresses the belief that Jim will turn himself in, and the sentence inherits its propositional content and truth-conditions from the belief it expresses. Some, perhaps most, semanticists would agree that that sentence expresses that belief, at least in some sense of 'express', but many would want to reverse that order of explanation: the sentence's semantic value is the proposition or truth-conditions, and derivatively is associated with the belief in that proposition.

Expressivism is committed to *mentalism*: that the meaning of a normative sentence is the attitude it expresses. It is likely also committed to full-blown mentalism, for non-normative sentences as well as normative ones, since there are complex English sentences that are part normative and part non-normative.[55] And if the expressivist is going to respect the principle of compositionality, then the meanings of complex sentences will be identified with attitudes that are literally built up out of other attitudes, arranged by the meanings of the expressions that connect the constituent clauses.

This kind of mentalistic theory is what Blackburn and Gibbard seem to have in mind.

Blackburn 1998 talks about the practical deliberator as an agent definable in terms of inputs and outputs: the inputs are representations about the world, and the outputs are

[55] See Schroeder 2008a chp 2, and Schroeder 2008c sec. 2. The argument the expressivism is committed to full-blown mentalism turns on the claim that the expressions that connect clauses to form complex sentences are univocal: according to the expressivist, they have to be functions from attitudes to attitudes when connecting normative clauses, and if they are univocal then they always are functions from attitudes to attitudes.

noncognitive states of emotional reaction, planning, intending, and other noncognitive or practical mental states or attitudes. The speech-act of saying that something is right expresses some such practical attitude: when we say that something is good or right, "we avow a practical state…(i.e.) we express this state, make it public, or communicate it. We intend coordination with similar avowals or potential avowals from others, and this is the point of the communication" (Blackburn 1998, 68-9).

Gibbard 2003 explains the meanings of sentences in terms of states of mind. Normative sentences are "plan-laden", because they express planning states of mind. The act of using a normative sentence expresses this plan, at least in the sense of communicating that one is in that state. The expressivists' account of language derives from its account of thought.[56]

Section 2.2: Expressivism's Negation Problem

The distinctive approach of expressivism to explain the meanings of normative sentences in terms of the noncognitive states of mind they express is exactly what leads to its problems with negation.

The central problem is the failing to account for *external* negation. The word 'not' can be added to (9) in two places, one scoping over the occurrence of 'must' and the other scoping under it.

(9) John must keep his promise
(10) It is not the case that John must keep his promise
(11) John must not keep his promise

[56] "Expressivism is crucially, then, a way of explaining some class of [psychological] judgments. Its account of public statements is an afterthought, an appeal to analogies with expressing beliefs" (Gibbard 2003, 76) (the parenthetical insertion is mine).

(11) is the internal negation of (9), whereas (10) is the external negation of (9). The structure of (11) is *Must(Not(p))*, whereas the structure of (10) is *Not(Must(p))*. I have used the more cumbersome locution 'it is not the case that' in (10) to make it clear that the negation scopes over the occurrence of 'must', but that is not absolutely necessary.[57]

The different ways that negation can apply to a state of mind can be revealingly displayed by descriptions of John's state of mind when he accepts one of (9) – (11).

(9a) John thinks that he must keep his promise
(10a) John thinks that **it is not the case that** he must keep his promise
(11a) John thinks that he must **not** keep his promise
(12a) John does **not** think that he must keep his promise

Unwin 2001 criticized Gibbard 1990 for being unable to account for external negation. His main point can be raised against the simplified view on which (9) expresses the plan for John to keep his promise. On that view, the descriptions of John's state of mind in (9a)-(12a) are equivalent to descriptions that involve plans.

(9b) John plans to keep his promise
(10b) ???
(11b) John plans **not** to keep his promise
(12b) John does **not** plan to keep his promise

Since (9a) describes John as being in the state of mind of accepting (9), the target expressivist view deems (9a) equivalent to (9b) below. Likewise, since (11a) describes John as being in the state of mind of accepting (11), the view deems (11a) equivalent to (11b). Also, since (12a) describes John as lacking the state of mind expressed by (9), the view deems (12a) equivalent to (12b).

[57] For example, the most salient interpretation of the sentence 'Employers may not date their employees' is one on which the meaning of 'not' scopes over the meaning of deontic 'may' despite how their occurrences seem to be arranged. The sense is something like: it is not permissible for employers to date their employees.

The problem, of course, is that there is no obvious way to fill in (10b). The descriptions of John's state of mind in terms of planning simply don't allow for another place to put a negation-word. And the problem is not merely a lacuna in how to describe somewhat complex states of mind. Since the expressivists' project is to explain the meanings of sentences in terms of the states of mind they express, the gap in (10b) shows how the target view is unable to say what (10) means. Yet, competent users of English have clear intuitions about what (10) means, and any theory of what English sentences mean needs to account for such sentences.

In particular, it is obvious to competent users of English that (10) is inconsistent with (9). They are contradictory sentences. (10) only differs from (9) by the presence of external negation, and so that difference obviously is involved in why these sentences are contradictory.

One facet of the negation problem is the need to explain why (9) and (10) (and other sentences relevantly like them) are inconsistent. Call that *the inconsistency problem*. Another, related problem is the need to explain how the meaning of (10) is derived compositionally, from the meaning and arrangement of its parts, i.e. from the meaning of negation applied externally to (9).[58] Call that *the compositionality problem*.

Part of the difficulty for expressivists is the oddity of the question: What does it mean to apply negation to an attitude? Attitudes simply don't seem to be the kinds of things that can be negated. Or at least, it is not obvious what that could be.

But, of course, expressivists have options worth exploring. I will now examine three ways that expressivists might try to respond to the challenge by trying to offer satisfactory answers to the questions posed to them. The discussion of these responses will draw out further facets of the negation problem.

[58] I assume that even expressivists want to adhere to the principle of compositionality on which the meaning of a sentence is determined by the meaning and arrangement of its parts.

Section 2.3: The 'lack of attitude' response to the negation problem

A first stab is that, whereas (9) expresses a state of mind that involves the plan for John to keep his promise, (10) expresses a state of mind that does not involve the plan for John to keep his promise. The suggestion is that (10) expresses the *lack* of the attitude expressed by (9). This proposal has the virtue of offering a prima-facie plausible account of what it means to negate an attitude: it means the *absence* of that attitude. This view also has an answer to the compositionality question of how external negation interacts with the meaning of (9) to produce the meaning of (10): external negation, on this view, takes an attitude as input and delivers as output a distinct state of mind that lacks that attitude.

Unfortunately, though, this proposal has a glaring problem that makes it not really worth developing. Earlier, when I first introduced the negation problem for expressivism, I appealed to descriptions of John's state of mind when he accepts (9) – (11). The 'lack of attitude' view conflates the meaning of (10a) with that of (12a).

(10a) John thinks that **it is not the case that** he must keep his promise.
(12a) John does **not** think that he must keep his promise.

This conflation is a big problem. While (12a) describes John as lacking an attitude, (10a) describes John as having a positive view about one of his available actions: that keeping his promise is not required. So, an expressivist needs to specify a state of mind to be expressed by (10) which includes a positive judgment about one of his options, rather than simply lacking an attitude. That judgment needs to be characterized.

Furthermore, we can see that the state of mind ascribed to John in (10a) is not itself decided about what he is to do. Suppose that John has only two alternatives to choose from:

keeping his promise, and not keeping his promise. Also, suppose that (10a) is true, and thus that John judges his option of keeping his promise to be not required. In that state of mind, John could additionally come to judge that his other option, not keeping his promise, is also not required. This would bring him to a coherent state of mind in which he accepts the external negation of both (9) and (11). Even then, he need not have decided what to do. So, the judgment expressed by (10) is not a plan, nor a decision, nor any state of mind that settles what to do.

I call this feature *intermediate judgment*: (10) involves a judgment that is intermediate between being undecided and being decided. Any normative sentence of the form *Not(Must(p))* involves a judgment that is a stepping stone along the way from being completely undecided, with no view about what to do, towards a decision that settles the question what to do and thus chooses one of the alternatives. The fact that the judgment expressed by (10) is an intermediate judgment in this sense is yet another facet of the negation problem that needs to be explained.

This point about intermediate judgment is similar to, yet subtly different from, an important point that Jamie Dreier makes in criticizing Gibbard 2003. Dreier shows how Gibbard has a problem about "mere permission": states of mind that permit or tolerate an action without also requiring it. However, it seems to me that his diagnosis of the problem appears to miss the fact that a state of mind that merely permits involves a distinct type of judgment that is intermediate between being completely undecided and being decided about what to do. His descriptions of what is expressed by a sentence like (10) are always phrased in terms of plans.

Dreier 2006a says that the sentence 'Miss Manners believes that it is *not* so that one must write thank you notes by hand', which is relevantly like (10a) in externally negating deontic 'must', is "true iff Miss Manners does *not* plan to write thank you notes by hand, that is, so long as she prefers writing them by hand or is indifferent between writing them by hand and not"

(227). But the lack of a plan is compatible with simply not having any view at all, and thus does not distinguish the positive judgment of someone who merely permits a certain course of action, a point which Dreier himself emphasizes. Perhaps that formulation was a mistake, though, because Dreier formulates it differently in a similar article on the same topic. Dreier 2006b says that that same sentence 'Miss Manners believes that it is *not* so that one must write thank you notes by hand' is "true iff Miss Manners has some plan in which she refrains from writing a thank you note by hand" (720). But that formulation is problematic, too, because it attributes a plan to Miss Manners when she need not have any plans at all.

Compare this point to what I said earlier about (10a): If John's state of mind really is as described in (10a), then John need not have any plan at all. Dreier's articulation of how the negation problem "sneaks back in" after he applies some patches regarding mere permission appears to miss the fact that accepting (10), or any sentence of the form *Not(Must(p))*, is a positive judgment that falls short of planning or any other way of deciding what to do.[59]

Section 2.4: The 'distinct attitude' response to the problem

Still, Dreier's discussion is quite instructive, especially with respect to criticizing expressivists' options for accounting for external negation. Dreier 2006a,b suggests that we think of requirement and permission as dual operators, symbolized by 'R( )' and 'P( )'. Since

[59] In fact, I suspect that Dreier understood the substance of the point but had some trouble articulating it. From the perspective of a view like Gibbard's planning-model, an agent can have a plan even though in her current circumstances she doesn't know what to do; the agent can have a contingency plan about what to do in hypothetical circumstances. So, the quotation I repeat from Dreier 2006b probably means to say *that there is some circumstance for which Miss Manners' state of mind plans to write thank you notes by hand*. Similarly, transposing this point to the case of John's promise, Dreier might say that (10a) is true iff there is some hypothetical circumstance for which John plans to break his promise. After all, John could have such a contingency plan even if he has no plan for what to do in his current circumstances where he needs to decide whether to keep the promise at hand. Still, the suggestion seems wrong. (10a) is a sentence about John's state of mind with respect to his current situation; he thinks that keeping his promise is not required in his actual circumstances. His plans for other, hypothetical circumstances are beside the point, and changes in circumstances might change whether keeping the promise is required. The lesson is that (10a) ascribes to John a kind of judgment distinct from planning.

they are duals, one can be defined in terms of the other using negation, but the definition crucially has to employ external negation as well as internal negation, e.g. (13) tries to define permission in terms of requirement and negation.

(13) $P(p) =_{df} \sim R(\sim p)$

Suppose that we already have an understanding of requirement in terms of planning. We could then explain what permission is in terms of requirement, and ultimately in terms of planning, using a definition such as (13), but *only* if we know what it means to externally negate requirement. And of course, that's just a way of stating the negation problem. Still, it is a helpful way of stating it. The dual nature of requirement and permission is such that any two of 'R( )', 'P( )', and external negation can be used to define the other.

This suggests a potential way for expressivists to respond to the negation problem, albeit one that quickly meets with difficulties. An expressivist might introduce an attitude distinct from planning to be the attitude that both is expressed by (10) and also is had by John if (10a) is true.[60] Let's call this distinct attitude *toleration*. The suggestion goes like this: What does it mean to negate the requirement that p? It's the state of mind that tolerates that ~p. What does it mean to negate the permission that p? It's the state of mind that plans that ~p. These answers only use negation inside of the attitudes of planning and tolerating, and the negation operator '~' is simply the ordinary truth-function. The point is that if we have an independent grip on the two attitudes, then we can define external negation in terms of them using only internal negation.

However, if the attitude of toleration is introduced as distinct from the attitude of planning, then it leaves it mysterious why planning and tolerating are logically related like dual operators are. Dreier 2006b emphasizes the vacuity of the suggested explanation, "Why is there

[60] Dreier says that he suspects Blackburn 1988 of doing this. Another example of the distinct attitudes view, with several idiosyncratic twists, is Horgan and Timmons 2006.

any incoherence in tolerating something and also requiring its contradictory? That is what we are supposed to explain. It's no good just to posit that they are incoherent" (715).

Section 2.5: The 'take disagreement as primitive' response to the problem

Gibbard 2003 offers a different reply to the negation problem. Gibbard assumes that there is an attitude of disagreement that can be taken towards other attitudes, and it is this attitude of disagreement that explains external negation. This apparently is supposed to help in the following way, since one can distinguish the meanings of (9) - (11) by saying that they express the respective attitudes in (9`) - (11`).

(9) John must keep his promise
(9`) The attitude of planning for John to keep his promise

(10) It is not the case that John must keep his promise
(10`) The attitude of disagreeing with planning for John to keep his promise

(11) John must not keep his promise
(11`) The attitude of planning for John not to keep his promise

On this understanding, Gibbard's view agrees with the distinct-attitudes view that (9) and (10) are associated with distinct types of attitudes and yet the same content: that John keeps his promise. For Gibbard, though, (10) expresses a complex type of attitude. He takes the attitude of disagreement, and its adversive-relation to whatever attitude it is taken towards, as primitive. His answer to the inconsistency problem, of why (9) and (10) are inconsistent, is that a state of mind that both plans for John to keep his promise and also disagrees with planning for John to keep his promise, is inconsistent because it disagrees with itself. His answer to the compositionality problem is that external negation contributes the attitude of disagreeing, and

that attitude combines with the attitude contributed by the embedded clause to determine the entire meaning of the sentence.[61]

However, a worry about Gibbard's view is that his "solution" to the negation problem appears to assume exactly what he was supposed to explain. Of course, it is true that some attitudes are inconsistent with others, and thus that they disagree-in-attitude. But it needs to be explained *why* two attitudes that do in fact disagree bear that relation to each other, since there are other states of mind that obviously do not disagree with each other – a headache is a state of mind, but it's not one that can be disagreed with. It is not obvious that the correct explanation of why attitudes disagree with each other, when they do, will favor expressivism. As Dreier 2006b puts it, "it could be that the states with which it makes sense to disagree are the ones that are really representations of independent fact. No expressivist could then let his account of negation be grounded in an appeal to the idea of disagreement in attitude" (716). Gibbard takes his attitude of disagreement and the attitudinal conflict it involves as primitive, and thus doesn't explain what needs to be explained.

Schroeder 2008a echoes Dreier's criticism of Gibbard's view and also adds another objection which depends upon the dialectic between Gibbard's expressivism and an ordinary truth-conditional approach to normative language. The objection is that Gibbard's approach illegitimately appeals to explanatory resources, both because such resources aren't needed by the

[61] Gibbard 2003 apparently accounts for the feature I call intermediate judgment by saying that a thinker can disagree with disagreeing with some action, in which case she rules out ruling it out and thus "permits" the action. However, this notion of "permitting" is problematic because there is no room for an intermediate judgment in Gibbard's theory of planning. Gibbard explains plans and decisions in terms of ruling out: to plan to act is simply to rule out not acting. So, the more complex state of ruling out ruling out not acting is a state that rules out the plan to act, and thus would seem to itself be decided on not acting. However, Gibbard apparently thinks it is possible to rule out ruling out each of one's alternative actions without lapsing into an inconsistent state of mind; such a thinker is supposed to explain what it is to be indifferent. This *sounds* good, except that Gibbard's view cannot distinguish that state of mind from one that is completely undecided about what to do, because he identifies a state of mind with the set of hyperstates it rules out. Such an "indifferent" state of mind rules out exactly the same hyperstates as a state of mind that is completely undecided, namely none of them. See Dreier 2006a,b for a more extensive criticism of Gibbard's failure to distinguish indifference and indecision.

ordinary truth-conditional approach and also because "there are no good examples" (Schroeder 2008a, p. 48, 51-4).

Gibbard appeals to a type of inconsistency that is inherent in distinct attitudes taken towards the same content (e.g., planning that p and disagreeing-with-planning that p). Schroeder calls this *B-type inconsistency* and juxtaposes it against the *A-type inconsistency* which, he claims, is all that an ordinary truth-conditional approach to normative meanings needs to use in its semantic explanations. A-type inconsistency obtains between a single kind of attitude taken towards a content and that content's negation (e.g. believing that p and believing that ~p). When two token attitudes are inconsistent with each other in this second, A-type way, they inherit the inconsistency of their contents.[62] Schroeder claims that only the second type of attitudinal inconsistency, the A-type which ultimately derives from the nature of inconsistent contents, is dialectically respectable as an explanatory resource. Gibbard, however, claims that the attitude of disagreement can conflict with other types of attitudes, and thus requires a kind of inconsistency that derives from the nature of attitudes rather than their contents, i.e., B-type inconsistency.

Schroeder appears to think that B-type inconsistency is not only dialectically suspicious, but also problematic in its own right. If expressivism claims to match the success of descriptivist semantic explanations, then it cannot appeal to unexplained semantic relations, especially if it doesn't provide good examples. He claims that expressivists who wish to make headway with the negation problem "are going to have to appeal to incoherence among attitudes that is of the very same type as the incoherence involved in both believing that p and also believing that ~p" (Schroeder 2008b, 710).

[62] Not every kind of attitude will inherit the inconsistency of its contents as beliefs do. There is nothing inconsistent with a state of mind that both fears that p and also fears that ~p. Fear is not an "inconsistency-transmitting attitude", in Schroeder's terms, whereas belief is.

Van Roojen 2010 echoes Schroeder's point, although he remains more open-minded than Schroeder seems to be about whether there are examples of B-type inconsistency. At least, van Roojen agrees with Schroeder on the point that expressivists who appeal to B-type inconsistency have more troubles with logic than those who appeal only to A-type inconsistency. He sees a connection between the tendency to appeal to attitudinal-conflicts that do not derive from propositional conflict, and an inability to distinguish semantic conflict from other kinds of conflict that we would rather classify as "pragmatic" or non-logical. For example, the Moorean sentence 'It is raining but I don't believe that it is raining' is definitely odd, because it somehow conflicts with itself, but it is not contradictory and in fact it could be true. Van Roojen 2010 claims that expressivists are prone to diagnose such pragmatic conflicts as logical conflicts because they are prone to appeal to something like B-type inconsistency:

> The deployment of non-A-type inconsistency to explain how normative sentences generate logical relations leads to the tendency of such proposals to overgenerate logical inconsistency… Expressivists who can make do with only A-type inconsistency for their account of the genuinely logical inconsistencies would be in a more advantageous position when it comes to distinguishing genuinely logical inconsistency relations from others (363-4).

Since expressivists explain meaning in terms of attitudes, it makes sense that they would tend to appeal to some kind of basic attitudinal conflict in order to explain the inconsistency of sentences. But the foregoing remarks from the critics amounts to some kind of consensus against the strategy of taking distinctively attitudinal conflict as primitive. That strategy is not dialectically respectable and furthermore it is downright mysterious, unless a deeper explanation is offered.

Section 2.6: Summing up

In order to solve the negation problem, one has to explain why (9) and (10) are inconsistent, while respecting the principle of compositionality, and while respecting the fact that

accepting (10) involves a positive judgment that does not involve a decision to act. Additionally, the kind of "conflict" appealed to when explaining the inconsistency of (9) and (10) needs to be a genuinely logical kind of conflict that can be distinguished from mere "pragmatic" conflicts. If one appeals to something like "B-type inconsistency", then one needs to explain what that is and why it is genuinely logical inconsistency. Furthermore, it is desirable to provide good examples of it, rather than simply postulating its existence and claiming that it does the work that nondescriptivists need it to do.

In the next section, I will respond to all of these facets of the negation problem on behalf of the speech-act view constructed that was in chapter two. I think we can get an independent grip on what it means to externally negate a nondescriptive meaning, by distinguishing the ways that speakers can disagree in conversation with an act of commanding. This will involve something like B-type inconsistency, but I won't take such disagreement as primitive. I explain the speech-act of *disputing* in terms of the way that the successful performance of the act changes a conversational context. I think I have also provided some good examples in chapter two, involving disputing assertions as well as disputing commands.

Section 3: Negation and Speech-Acts

Section 3.1: A Speech-Act Account of External Negation

Any version of nondescriptivism needs to explain what it is to apply negation to the type of nondescriptive meaning that it employs in the semantics of normative sentences.

The theory constructed in chapter two claims that a sentence's meaning is given by saying which speech-acts that sentence is conventionally suited for being used to perform;

sentence-meaning is speech-act potential. A normative sentence is suited for a specific type of imperatival speech-act. Such a project needs to respond to questions that parallel those regarding negation, inconsistency, and compositionality that the expressivist faces.

An easy way to see the apparent problem for the speech-act version of nondescriptivism is to look at how imperative sentences can be negated. It is impossible to externally negate an English imperative sentence, in the sense that there is no syntactically well-formed sentence in which negation has scope over the imperative mood. The only negation of (14) is (15), which is the internal negation of (14) because the contribution of 'not' scopes under the imperative mood.

(14) John, sit down!	IMP[that John sits down]
(15) John, don't sit down!	IMP[not (that John sits down)]
(16)# It's not the case that, John, sit down!	not (IMP[that John sits down])

The speech-act theory assigns an imperatival meaning to a normative sentence like (17). But it is easy, if somewhat awkward, to externally negate (17). The meaning of (19), on this view, includes an external negation of an imperatival meaning. What could that mean?

(17) Jim must turn himself in
(17a) ASSERT(Must(p))|COMMAND(p)

(18) Jim must not turn himself in
(18a) ASSERT(Must(~p))|COMMAND(~p)

(19) It's not the case that Jim must turn himself in.
(19a) ASSERT(~(Must(p)))|DISPUTE(COMMAND(p)

The answer is that externally negating an imperatival meaning involves dispute. Although there may not be well-formed imperative sentences that have 'not' scoping over the imperative mood, there are interpretations available for negating imperatival speech-act-potential. This is shown by the data involved with the argument from denial, which was

introduced in chapter one section 6 and then explained in chapter two section 4. There are two types of negation: content-negation, which I symbolize with '~', and speech-act-negation, which I symbolize with 'DISPUTE( )'. I assume without argument, for now, that an occurrence of 'not' can contribute either or both of these types of negation. Since dispute by definition only takes speech-act meanings as an argument, an occurrence of 'not' can only mean dispute when there is an available speech-act meaning to be its argument.

(19) is inconsistent with (17) on any univocal reading of what 'Must(p)' means as it occurs in each of them. The assertions they are suited for are contradictory because they are inconsistent-in-content. The non-assertive acts they are suited for are contradictory because they are inconsistent-in-force. These notions of inconsistency were distinguished and explained in chapter two section 5.1.

Moreover, external negation is not conflated with internal negation. The meaning of (19) is clearly distinguished from that of 18). (17) and (18) are suited for commanding. (19), on the other hand, is not suited for commanding, but rather for permitting. The speech-act of permitting is not introduced as something distinct from commanding, but instead is introduced as a way of disputing commands. This avoids problems that parallel those for an expressivist who introduces toleration as an attitude distinct from disapproval.[63]

My response to the negation problem is constructive, because it explains how and why applying external negation to a normative sentence produces a complex sentence that is suited for a speech-act that is inconsistent with that of the negated sentence. It also explains this fact

[63] The attitude of tolerating is either defined in terms of planning and negation, or it isn't. If it is, then it doesn't help to explain what external negating a plan means. But if it isn't, then it seems mysterious why it is inconsistent with planning. My view, on the other hand, first gets an independent grip on what externally negating an imperatival speech-act is (disputing it) and then introduces permissive speech-acts defined in terms of that kind of negation and commanding.

compositionally, since ‘not’ contributes the force of disputing. Moreover, I didn’t simply postulate speech-act-negation and inconsistency-in-force.

A critic might prefer to call inconsistency-in-force a form of “pragmatic conflict” rather than semantic conflict, e.g. because it involves what speakers do in conversation. However, the ‘pragmatic’ label would be misleading, since my proposal is that sentence-meanings are given by their roles in a conversation. Imperative-meanings are explained by how they change the command-list, and declarative-meanings are explained by how they change the acknowledgment-list. Similar claims hold for permissive sentences and would also hold for sentences suited for rejecting assertions, if there are such things.

There is an important difference between the pragmatic conflict involved with Moore’s “paradox”, as exemplified in (20), and the conflict involved with a sentence that is itself inconsistent-in-force, such as (21).

(20) It is raining and I don’t believe that it is raining.
(21) Don’t push the button (and that’s a command), but you may push the button.

(20) can be true, and it can be uttered to successfully perform an assertion, albeit with some infelicity. The success of that assertion would ensure that a certain content is a member of the acknowledgement-list: that it is raining and the speaker doesn’t believe it. The infelicity involved with (20) is merely that it would be odd for a speaker to use it, since using it would apparently indicate that one believes that it is raining followed by an explicit denial of that belief.

It would also be odd for a speaker to utter (21), but the oddity is different in kind. It is impossible for an utterance of (21) to successfully change context in all of the ways it tries to do so, because it attempts both to command an addressee not to push the button and also to dispute that command by permitting the addressee to push the button.

Whereas the expressivist views have been criticized for taking B-type inconsistency as primitive and unexplained, and also for tending to conflate semantic and non-semantic types of conflict, the speech-act view claims that we can get an independent grip on speech-act-negation. It responds to the criticism by giving a deeper explanation of the nature of the conflict and why it is a semantic type of conflict.

Section 3.2: Searle on Speech-Act Negation

Searle 1969 observed that (22) cannot mean the same as (23). An instance of Searle's point concerns negation: the external negation of (22), namely (22a), means something quite different from the external negation of (23), namely (23a).

(22) This is good
(22a) It is not the case that this is good

(23) I (hereby) commend this
(23a) It is not the case that I commend this

Extending the lesson, 'Must(p)' does not mean the same as 'I hereby command that p'. This is indeed true, but it is not to the point. Speech-act semanticists should not commit themselves to the unwise claim that such explicit performative sentences are the only way that sentence-meaning can be suited for performing speech-acts.[64] In fact, Hare 1970 clearly denies that (22) means the same as (23).

Despite his arguments against nondescriptivists like Hare, Searle himself was interested in advancing a nondescriptivist project. Searle 1969 explains how some sentences involve "illocutionary force indicating devices", whose meaning involves something like speech-act-

[64] It seems to me that Searle's work on speech-acts, e.g. Searle 1969 and Searle and Vanderveken 1985, gives too much prominence to explicit performative sentences.

potential. Additionally, Searle recognized that those sentences could be negated. He distinguishes illocutionary negation from propositional negation, and says that the former negates force rather than content (1969, 32-3).

For example, Searle claims that the meaning of the explicit performative sentence 'I promise that p' is explained using the speech-act of promising. The illocutionary negation of that sentence, or its "illocutionary denegation" as he later called it, is 'I do not promise that p'.[65] Searle claims that this amounts to a *refusal* to perform the act of promising that p, which dovetails somewhat with my notion of dispute. I think that Searle was on the right track in thinking that there is a distinctively speech-act type of negation that involves refusal.

However, his examples are always phrased as 'I do not perform the act A', and hence are most naturally understood as asserting a description of what one is not doing. He says that the illocutionary negation of 'There are horses' is 'I don't say there are horses' (Searle 1969, 32). It seems that Searle understood sentences in which illocutionary negation takes wide scope as autobiographical statements, which fits into his approach of taking explicit performative sentences as the paradigmatic form of indicating force.

My notion of dispute is more clearly specified as the reversal of the change-in-context of the speech-act it disputes. It is a refusal to allow a conversational context to change in a certain way. Paradigmatically, an act of disputing is performed in response to another conversant's attempt to do something, and then it is a refusal to let the attempt succeed rather than an autobiographical statement like Searle's notion of illocutionary negation. An act of disputing

[65] Searle mentions illocutionary negation as early as Searle 1969, p. 32: "an utterance of 'I do not promise to come' is not a promise but a refusal to make a promise. An utterance of "I am not asking you to do it" is a denial that a request is being made and is quite different from the negative request 'Don't do it'." A little more is said about illocutionary denegation in Searle and Vanderveken 1985, p. 4. Hare 1970 talks about denegation, but Hare confusingly conflates the distinction between propositional negation and denegation, with the distinction between internal and external negation.

can also be performed much later in a conversation or even before anyone has attempted to perform it. The act of disputing should not be confused with an assertion that one is performing an act of disputing, nor with an assertion that one is not performing some other act. If we wanted, we could introduce promissory force into my system, I would clearly distinguish between all of the following acts:

(24) PROMISE(p)
(25) DISPUTE(PROMISE(p))
(26) ASSERT(that I dispute the promise that p)
(27) ASSERT(that I do not perform the act of promising that p)

Section 4: Comparing Expressivist and Speech-Act Versions of Nondescriptivism

The biggest difference between expressivism and my speech-act theory, with respect to their apparent problems with negation, is that expressivism accounts for sentence-meaning in terms of private states of minds (mentalism), whereas my speech-act theory accounts for sentence-meaning in terms of the public actions that comprise conversations. My theory does not require anything at the level of thought in order to do semantics.

Of course, I don't deny that it would be desirable to have a worked out theory of normative thought. It's just that my approach to normative language doesn't require a worked out theory of normative thought. Expressivism's mentalistic approach tries to account for both normative thought and language at once, but the linguistic issues about negation are different than the psychological issues.

For example, the way in which normative language guides action, according to the speech-act view, is that literal uses of a simple deontic 'must'-sentence can be understood as

having the same effect as literal uses of a corresponding imperative sentence: they ensure the existence of a requirement on the conversational record. This notion of requirement is essentially public; conversants treat something as a requirement only if they have publicly shared expectations about how certain agents will act. The speech-act of creating a requirement is an interpersonal way of restricting permissible actions. This contrasts with what a paradigmatic expressivist view focuses on at the level of thought.

The way in which normative thought guides action, according to Gibbard 2003, is that it constitutes a plan or intention to act in a certain way. Normative thoughts are claimed to be private attitudes or mental states that can *cause* action. However, plans and intentions are not good mental analogues of publicly recognized requirements. Forming a plan doesn't create a requirement. For example, one can plan to do what one knows is impermissible, and failing to succeed in one's plans doesn't necessarily thwart the normative expectations about what should or must be done. It is not obvious how practical mental attitudes are connected with deontic necessity, although at the level of language there is a clear way in which commanding creates a requirement for how to act.[66]

Still, even if expressivism is incorrect to assimilate normative language to the expression of noncognitive attitudes, and even if the speech-act view offers a correct account of normative language, there remains the question of how to explain normative thoughts, especially those involving negation. Is it possible that the success of the speech-act view can be mimicked at the level of thought?

[66] Historically, nondescriptivists have claimed that there is a conceptual connection between normative judgment and practical attitudes that can motivate an agent to act. For example, Gibbard 2003 claims that thinking one ought to do something just is planning to do it. Even if that were correct, there would still be a disanalogy between planning and commanding: a plan would involve *thinking* that one ought to do what one plans to do, whereas a command involves making it the case that one is required to do as commanded.

In section 4.1, I'm going to look more closely into the details of Gibbard 2003 in order to isolate what goes wrong with respect to negation, and how it might be altered to mimick the speech-act view in crucial ways. Then in section 4.2, I will speculate about how such a theory of normative thought might take shape and whether that might be a promising avenue for expressivists to use in responding to their problems with negation.

Section 4.1: Differences that Matter

Gibbard 2003 tries to explain external negation in terms of the attitude of disagreeing, which can be taken towards other attitudes, as I mentioned in section 2.2.[67] My speech-act semantics is structurally similar in an important respect: it explains external negation in terms of the speech-act of disputing, which can be directed at other speech-acts. Still, there are also important differences.

Gibbard's view runs into trouble because (i) it implies that disagreeing with every other option but one is the same state of mind as deciding to do the remaining option, and (ii) a state of mind is identified with the set of possible states of mind with which it doesn't disagree. This prevents Gibbard from distinguishing states of mind that are clearly distinct, as I will explain in a moment. The speech-act of disputing, on the other hand, doesn't run into this problem at all, and I will explain why.

Gibbard's notion of disagreement is an attitude of ruling something out of consideration (2003, 72). If one disagrees with an action, then one rules it out as no longer an option or alternative for acting. If one disagrees with an attitude, e.g. with a plan, then one rules out that plan; it is no longer an option for what will be decided upon.

[67] "The expressivist's strategy is to explain negation by explaining the state of mind of accepting a negation" (Gibbard 2003, 72). "A negation, we say, is what one accepts when one disagrees – and this explains negation" (74).

Moreover, it would be inconsistent to rule out all of one's alternatives for acting (2003, 56). So, if there were only two options for acting, and a thinker rules one of them out of consideration, then she thereby decides to take the other option. That's just what it is to plan, on Gibbard's view: to rule out the other alternatives. Ruling out is a way of deciding what to do.

Suppose there are two alternatives for Jim: turning himself in or not turning himself in. If he rules out the first option, he thereby chooses the second option. This has some rather surprising implications for Gibbard's theory, since disagreement is also supposed to be the meaning of external negation.

(28) Jim must turn himself in	PLAN(that Jim turn himself in)
(29) It's not that case that Jim must turn himself in	
(30) Jim must not turn himself in	PLAN(that Jim not turn himself in)

Suppose that the meaning of sentence (28) is specified as planning for Jim to turn himself in, and thus that the meaning of (29) is specified as disagreeing with planning for Jim to turn himself in, as Gibbard would have it. Then, if Jim rules out the first option, and thus disagrees with turning himself in, it follows that he accepts the external negation of the plan to turn himself in. But that commits him to, indeed puts him in the same state of mind as, planning to not turn himself, i.e. (30). By accepting (29) Jim thereby accepts (30). Gibbard's theory implies that what it is to accept an external negation of the normative sentence (28) (ruling out/disagreeing with the plan that Jim turn himself in) is equivalent to accepting the internal negation of (28), i.e. (30) (planning that Jim not turn himself in). But clearly there is a difference between accepting the externally negated sentence and accepting the internally negated sentence; they are very different states of mind. Also, the meanings of those sentences are clearly different, but they would mean the same on an expressivist view if they express the same states of mind.

Additionally, Gibbard's theory implies that it would be inconsistent to accept the external negation of (28) and also the external negation of (30), for that would rule out all the options and thus would put one in an inconsistent state of mind that disagrees with itself. But it clearly is coherent to think that neither is it the case that one must turn oneself in nor is it the case that one must *not* turn oneself in. Gibbard needs to be able to recognize a third way of passing judgment on the issue confronting Jim, distinct from the plan to do one alternative and the plan to do the other alternative. Gibbard also needs for it to be a consistent state of mind to have that attitude towards incompatible alternatives, e.g. to have it towards p and also towards ~p.

The speech-act view keeps external negation and internal negation fully distinct. If the meaning of (28) suits it to command that p, then the meaning of (29) is (31), the dispute of that act. The internal negation of (28), i.e. (29), is (32), the command of the opposite action/content.

(31) DISPUTE(COMMAND(p))
(32) COMMAND(~p)

My notion of dispute is a refusal to allow context to change so that there becomes a new requirement, e.g. the requirement that Jim turn himself in. Importantly, this is *not* the same as changing the context to create the opposite requirement, the requirement that Jim not turn himself in. Rather, it is to *refuse* to accept that there is a requirement for Jim to turn himself in. The act of disputing the command of one alternative keeps the other alternative a viable option by preventing it from being ruled out.

Additionally, one can dispute the command of both alternatives, and thus ensure that they both stick around as options. So, one can felicitously use the external negation of (28) and also the external negation of the internal negation of (28). This would perform speech-acts that are

equivalent to permitting that p and also permitting that ~p. Something similar can happen at the level of thought, but Gibbard's view seems unable to distinguish that state of mind.

Whatever one's account of external negation amounts to, it should allow for a consistent state of mind that accepts both *Not(Must(p))* as well as *Not(Must(Not(p))).* Oddly, Gibbard explicitly recognizes that he needs to distinguish the two states of mind involved with internal and external negation, but he then goes on and commits himself to the claim that the only states of mind that involve a decided judgment about whether Jim is to turn himself in, are the two planning states.[68] This isn't enough to distinguish the intermediate judgment corresponding to external negation.

Another important criterion for assessing a theory of practical thought, which is related to the one just articulated, is the need to distinguish being *indifferent* from being *undecided*. Gibbard wants to explain being indifferent about what to do by distinguishing two ways of choosing or deciding. He wants "to distinguish rejecting an alternative by preference from simply not choosing it in that, from indifference, one chooses another" (54). If a thinker is indifferent between two alternatives for acting, she doesn't rule out either alternative even if she decides to do one of them.[69] So, Gibbard tries to say that an indifferent state of mind is one that keeps more than one alternative around as an option for acting. However, this doesn't

[68] Gibbard does *try* to allow for a third state of mind, in addition to the plan that p and the plan that ~p. He is careful to say that one can "permit" an action, by disagreeing with disagreeing with the action. That is to rule out ruling out the action, and thus to ensure it stays around as an option for acting. This *sounds* like it is on the right track. But there are at least two big problems. First, ruling out is a way of becoming decided what to do and thus forming a plan: by ruling out ruling out the alternative that p, one thereby rules out the plan that ~p, and so also comes to form the plan that p. Gibbard's identification of planning with ruling out all the other alternatives commits him to thinking that the only decided states on that issue are those two plans. Second, the only other state of mind that could be used to explain permission and indifference is an undecided state of mind, and that would conflate being decidedly indifferent with being undecided, as I argue in more detail in the text.

[69] I don't think Gibbard ever explains what it would mean to choose something without rejecting it by preference. The only description he gives of deciding upon some course of action, is ruling out not doing it.

distinguish being indifferent from being undecided. A thinker who is undecided with respect to those alternatives also refrains from ruling out either one, and keeps them around as options.

Dreier 2006 usefully summarizes Gibbard's problem as one about "mere permission". Gibbard claims to distinguish permitting from simply not ruling out (2003, 56). Permitting an alternative is ruling out ruling it out. It is supposed to be a state of mind that decidedly keeps that alternative an option. Furthermore, that state of mind of permitting is supposed to be different from a state of mind that simply has not yet chosen or formed a preference on the matter. But what distinguishes the attitude of permitting from simply lacking a plan? It seems that Gibbard's view implies that nothing distinguishes them.

The problem is that Gibbard identifies a state of mind with the hyper-decided states that it allows.[70] The state of mind that decides to keep both of two alternatives around as options allows exactly the same hyper-decided states as the state of mind that keeps both of those alternatives as options simply because it hasn't yet decided.

A hyperstate is decided with respect to every issue of what to do: for every alternative, it either rules it out, or rules out ruling it out. Hyperstates, themselves, can also be ruled out by one's state of mind. Suppose that we are considering two alternative courses of action. A state of mind that plans to do the first alternative rules out every hyperstate that doesn't plan to do it (i.e. the states that plan otherwise, and also the states that keep both alternatives around as options). A state of mind that keeps both alternatives as options for acting does not rule out the plan to do the first and does not rule out the plan to do the second. So, the set of hyperstates that it allows and agrees with includes those states that plan to do the first, those that plan to do the

[70] "The content of a state of mind that mixes fact with plan, we can now say, *is given by the hyperstates that it allows* and the ones it rules out" (2003, 57). The emphasis is Gibbard's. Ruling out a state of mind is disagreeing with it, in Gibbard's terminology. If you don't disagree with a state of mind, then you allow it. Thus, the claim in this quotation doesn't need the final, un-italicized conjunct.

second, and also those that keep both options around. This is what it is to be indifferent, on Gibbard's view. However, a thinker who is undecided about which of these alternatives to choose also does not rule out any of those hyperstates, because she too does not rule out either alternative and keeps both around as options for acting. So, the indifferent thinker and the undecided thinker allow the same hyperstates. So, according to Gibbard's claim that a state of mind is identified by the set of hyperstates that it allows, these are the same states of mind. But that is false.

A thinker who is undecided with respect to some alternatives certainly doesn't disagree with a thinker who is indifferent with respect to them. We would like to say that they don't quite *agree* either, since one has decided to keep both options around whereas the other simply hasn't decided. But, if one assumes that their mental states are identified with the set of hyper-decided states that they don't disagree with, then we have to say that the indifferent thinker and the undecided thinker are in complete agreement, indeed they are in the same state of mind. And that's false. An expressivist should reject the identification of states of mind with sets of hyperstates.

What is needed instead is (i) that the attitude corresponding to the external negation of a normative sentence not itself be a way of planning to act (and not equivalent to accepting that sentence's internal negation), and (ii) that the mental profile of permitting or tolerating some course of action include some feature that distinguishes it from the mental profile of being undecided. There must be a state of mind that is decided, in the sense of passing judgment on an alternative, but which is not a way of deciding how to act.

Section 4.2: Can an Expressivist Mimic the Speech-Act View?

If an expressivist wanted to copy the structure of the speech-act view, then she would identify a mental profile with an organized grouping of lists, rather than with a set of hyperstates. A mental profile involves the organization of information that is being considered, with different places to put information for which one renders different kinds of judgments. Let's focus on what is needed for practical reasoning, setting aside for the moment the mental apparatus used to gather and assess evidence and keep track of beliefs, doubts, denials, etc. I will attempt to construct a theory of mental profiles that parallels the theory of conversational context I developed in chapter two.

The goal of practical reasoning is decision and intention. To decide on a course of action is to form an intention to act that way. I will use propositions, conceived of as sets of worlds, for the content of an intention, although I won't here argue against an alternative approach on which the content of an intention is distinguished from the content of a belief. To intend to go to college, as I will conceive of it, is to bear the attitude of intending towards the proposition that one will go to college.

Intention is supposed to be the analogue at the level of thought for command. Although I will reconsider this claim later, this is what an expressivist starts with. An intention is a restriction on action. If I intend that I make it the case that p, then I'm going to strive to ensure that the future is a p-world. So, let's posit in a mental profile a list of things that are intended: *the intention-list*. A proposition goes onto this list when a thinker intends to make it true.

The intersection of the intention-list is a set of worlds which I will call *the set of options*. Each world in this set is a particular way of acting, i.e. bringing about that world. Usually, the set of options will be divided into discrete subsets which correspond to the actions that we actually

have the ability to do, and which can also correspond to issues of what to do that we are considering. Those subsets are alternatives for acting, and they can be divided up differently for different purposes. The set of options is itself a subset of the larger set of possible future states of the world, which is only restricted by the laws of nature, the past history of the actual world, and perhaps also by facts about an individual's ability. The set of options is obtained from that larger set by the restrictions from the intention-list.

Forming an intention is thus accounted for, in this framework, as the act of eliminating options for acting. This is parallel to the way in which a commanding speech-act can eliminate permissible courses of action in conversation. It also corresponds to Gibbard's idea that one forms a plan by ruling out potential actions.

A thinker can get into different kinds of states of mind as she goes through the process of first considering some alternatives for acting and eventually ending up with a decision. The first stage of considering alternatives divides up the set of options with respect to the issue being considered. For example, a thinker might wonder what to do tonight, which organizes her options in a way that makes it salient what are the discrete alternatives with respect to that issue.[71] As she proceeds to figure out what to do, she can form judgments about the status of each alternative, perhaps in relation to the others or perhaps in its own right. For example, she might figure out that she prefers going out to staying in, and thus rank the former alternative higher than the latter in a preference-ordering. She might also get stuck or distracted and leave the matter undecided, without having passed any judgment on the alternatives. Additionally, she can end her deliberation short of a full blown decision to act, by concluding with a judgment that more than one alternative is equally or incomparably ranked with respect to each other. We need

[71] So, in the terminology I'm using in this section, an *option* is a possible world, and an *alternative* is a set of options, i.e. a proposition. When one considers a practical issue (what to do) one organizes options into alternatives.

to be able to distinguish each of these possible stages in a process of practical reasoning, so mental profiles should include enough structure to differentiate them.

An important piece of practical reasoning that cannot be left out involves second-order mental states. We can form an attitude about our own intentions. For example, an agent might realize that she wants to keep an option or alternative open, and thus will decide not to intend in any way that would rule it out. This isn't a decision to act in one way rather than another; rather, it is a judgment that weighs against forming any intention that would rule out a certain option or alternative. Suppose that our agent wants to keep around the alternative of going to a certain restaurant. Let p be the proposition that she goes to the restaurant. I will say that she places the proposition that ~p onto *the reason-against-intending-list*. This is to judge that there is some inconclusive reason against intending that ~p, and thus it serves as an obstacle to eliminating the alternative that p (that is, it serves as an obstacle to forming the intention that ~p). To judge that there is reason-against-intending that ~p guarantees that there are p-worlds in the set of options, and it will expand the set of options if one had previously intended that ~p.

Obviously, this RAI-list is supposed to be the analogue of the disputed-command-list in the speech-act semantics. It is supposed to serve a similar function. A judgment that there is reason-against-intending that p serves the purpose of (i) registering a judgment about the alternative that p, a judgment that should be equivalent to seeing some inconclusive consideration in favor of the alternative that ~p; (ii) ensuring that there are ~p-options; and (iii) providing an obstacle to any future formation of an intention that p.

Several comments are needed about this RAI-list: *first*, it has to involve inconclusive reason since judging that there is conclusive reason against the option that p is simply to intend that ~p; *second*, a thinker who at one time intends that p and at a later time judges that there is

reason-against-intending that p, without lapsing into inconsistency, thereby has removed that p from the intention-list and added it to the RAI-list, and that counts as a change of mind about that alternative; *third*, the other direction is also a change of mind since a thinker who at one time judges that there is reason-against-intending that p and then later forms the intention that p has to have given up the considerations in favor of the alternative that ~p in order to have ruled it out as no longer an option for acting;[72] *fourth*, there is no obstacle in moving from a state of mind that RAI-judges that p and then forms the intention that ~p, and in fact that can be a natural progression of thought since it moves from holding onto that ~p as an option, to an intention to take that option; *fifth*, it is possible to consistently RAI-judge that p and RAI-judge that ~p at the same time; and *finally*, one can never form an intention in virtue of forming an RAI judgment. That last comment is important because it makes an RAI judgment very different from the attitude that Gibbard 2003 calls "permitting", namely ruling out ruling out something (56). If such "permitting" is a decided state, as Gibbard seems to have it, then it is a decision to act in a certain way. But forming an RAI judgment is never a decision to act one way or another; it only serves to hold onto an option.

There is an explanatory debt here. It would be an inconsistent state of mind to have a single piece of information on both the intention-list and the RAI-list. That would be a state of mind in which one eliminates an alternative for acting and also holds onto it ensuring that there are options for acting which would bring it about. Formally speaking, this is explainable: having that p on the intention-list guarantees that there are no ~p-worlds in the set of options, and having

[72] Of course, there are many ways of using terms like 'reason' and 'considerations for/against' both in ordinary language and in philosophical discussions. I am not trying to figure out their meanings. Instead, I am carving out a semi-technical role for these terms, which likely does not agree with every established way of using them. For example, it makes sense in ordinary language to say that one intends to do something with reservations, recognizing the reasons against what one intends, and that one can see considerations in favor of an alternative that one rules out. But in the sense in which I am using 'reason-against-intending', one cannot say such things consistently.

that p on the RAI-list guarantees that there are ~p-worlds in the set of options. But one needs to explain why one sets up the formalism in that way. At the level of speech-acts, the inconsistency between commanding and disputing a command is explained in terms of their opposite essential effects, which are ways that conversants can try to change a conversation. To apply this idea at the level of thought, however, requires that one say more about this notion of 'reason-against-intention' and argue that we actually do make such judgments and that they actually are inconsistent with intention as advertised. Also, an expressivist has the additional burden of justifying or arguing for the claim that an RAI judgment is a non-cognitive attitude. (I will come back to this point below.)

Given the setup of a mental profile so far, with the intention-list and the RAI-list, we can explain what "mere permission" is at the level of thought. An alternative for acting (e.g., that p) is merely permitted just in case it is not on the intention-list and its opposite alternative (that ~p) is on the RAI-list. The set of options determined by such a mental profile is guaranteed to have some options in which that p and others in which that ~p.

Presumably, a thinker does not only eliminate and hold onto options for acting, but also orders them into a preference-ranking, as mentioned before. One prefers a_1 to a_2 just in case one sees considerations in favor of a_1 that are more important (or somehow more favorable) than those in favor of a_2. Seeing considerations in favor of a_1 is the same as judging there to be reasons-against-intending $\sim a_1$. This connection between preference and reasons-against-intending can help define what it is to be indifferent.

A state of mind that is *indifferent* between two or more alternative options for acting a_1, …, a_n is one that ranks them equally highly, i.e. none of a_1, …, a_n is ranked higher than the other, because it sees reasons-against-intending every one of them, although none of those

considerations outweighs the others. This is distinguishable from a state of mind that is *undecided* with respect to those alternative options, namely a state of mind in which the issue is considered, and so the options are grouped into alternative ways of acting, but the alternatives are not ordered and none of them appear on the RAI-list. A state of mind that is indifferent amongst every alternative for acting has to include them all on the RAI-list, or it would simply be an undecided state of mind.

This account of mental profiles lives up to much of what Gibbard 2003 postulates about states of mind: it shows how a thinker can form a plan or intention by eliminating potential actions, the actions not ruled out are genuine options (they are "allowed" in his sense), and these options can be ordered by preference. It also can carry on the essential expressivist claim that the meaning of a normative sentence is given by a practical mental state such as intending to do something.

The account sketched here arguably improves upon Gibbard's account by adequately accounting for indifference and indecision, and by characterizing an indifferent state of mind with a judgment that is not itself a decision to act one way or another. A crucial difference is that I have deliberately avoided Gibbard's claim that mental states are identified with sets of hyperstates. Instead, I have added structure to what mental states are, and identified them with profiles that include distinct places in which to register information.

An expressivist could use mental profiles with such structure to explain the meaning of normative sentences, including external negations of normative sentences. If the meaning of (28) is the intention for Jim to turn himself in, then the meaning of (29) is the judgment that there is reason-against-intending that Jim turn himself in. Additionally, one could accept the external negation of (28), while also accepting the external negation of the internal negation of (28), by

judging there is reason-against-intending both of Jim's alternatives. So, the account sketched here arguably improves upon prior expressivist attempts at explaining external negation.

That much seems good for expressivism. Its problems with negation are not completely hopeless. I agree with Schroeder 2008a that the solution to expressivism's structural problems with negation, is to add structure. The difficult part, however, comes in arguing for or justifying the additional structure, since there are different ways to do so. This is exactly the problem with the theory of mental profiles: it includes unsupported structure. Moreover, expressivism includes additional constraints on how it can argue for or justify such additional structure, because it claims that the state of mind involved with accepting a normative sentence is noncognitive and that normative concepts do not function to describe reality.

I think there are some serious problems with the theory of mental profiles that I have just been sketching. The first is a problem for its employment by the expressivist. Why shouldn't the judgment that there is reason-against-intending some option for acting be conceived of as a cognitive judgment that classifies actions in terms of their real features? If it were a cognitive judgment, then it might be explained as believing that considerations inconclusively favor some option. But if it is instead supposed to be a noncognitive judgment, rather than a belief, then there remains an explanatory debt related to what exactly it is. It cannot be a state of mind that would move one to act, *ceteris paribus*. For it is important that judging there is reason-against-intending that p, never count as intending that ~p. The fact that Gibbard's notion of disagreeing/ruling out is a way to decide how to act prevents him from adequately accounting for external negation.

Secondly, I don't think that anything I have said about mental profiles yet explains how an agent comes to act. Importantly, nothing has been said about *choice*, other than the implied

claim that a rational agent chooses from amongst the set of options, and will try to choose options that are ranked higher in terms of preference. The lack of detail about choice would seem to be a major defect in a theory of practical thinking. Yet, I believe that defect is also in Gibbard 2003, which I was trying to alter in such a way as to mimic my speech-act theory.

Gibbard 2003 says a lot about his notion of planning, but planning doesn't necessarily involve choice: planning is simply ruling out some alternative action. Gibbard is explicit that "it is in the nature of planning, after all, to distinguish rejecting an alternative from preference from simply not choosing it in that, from indifference, one chooses another" (54). Planning is simply rejecting an alternative from preference. That need not involve choosing another alternative; planning only involves choice when the planning leaves just one alternative remaining. Moreover, someone might not plan either way and yet choose out of indifference. So, Gibbard's notion of planning is different from choosing. And preference is different from choosing, too, since one can rank alternative actions without being able to actually choose amongst them. But that leaves the notion of choice with very little said about it, in Gibbard's theory, which seems to be a defect in a theory of practical reason and agency.

I don't think that every theory of normative sentence-meaning needs to account for practical thinking and reasoning. But a mentalistic theory of normative language is committed to doing so. Since expressivism is a form of mentalism, it has an extra burden of adequately explaining parts of practical thought, such as choice, that might not play a role in normative semantics.

This leads into another criticism of the theory of mental profiles. I wonder whether it was a mistake to use the word 'intention' to label the list that restricts available actions into those that are genuine options. The judgment signified by adding information to that 'intention'-list

seems more like a normative judgment than anything else. The role it plays is that of a judgment of deontic necessity. Intention is not exactly like that. It seems possible for an agent to know that some action is forbidden, and yet intend to do it anyway. Intention should be more closely aligned with choice than with judgments of what is required or forbidden. Perhaps there is a fundamental flaw in the theory I was offering the expressivist: it might mistakenly purport to account for practical thoughts like intentions when in fact it only describes normative thoughts about what is required or forbidden. Of course, an expressivist like Gibbard denies the difference between them. But an intention is something that *moves* one to act rather than merely limiting one's alternatives by deeming some of them not an option.

Finally, I wish to come back to a point I noted at the beginning of section 4. An important disanalogy between the level of thought and language seems to wreck the correlation between the speech-act of commanding and the attitude of intending. A successfully performed command creates a requirement; it is a move in the language game that can indebt someone to do something for the commander. But intending is nothing like that. The closest mental correlate to commanding, it seems, is not intending, after all, but rather thinking that one is obligated to do something. Again, it seems that it is normative judgments which are better modeled in terms of the mental profiles that restrict options for acting, rather than intentions. But this result doesn't help expressivism and its distinctive claim that normative judgments simply are practical states such as intentions.

As a theory of *language*, the theory of mental profiles sketched in this section can make the same simplifying assumption that extant expressivist theories make: normative sentences express noncognitive states of mind in the same sense that ordinary declarative sentences express beliefs. The relevant sense of 'express', of course, brings with it the mentalistic approach that

explains language in terms of thought. This reliance on the expression-relation is not justified by linguistic considerations, but rather is a mere convenience meant to help expressivism deliver on its promise to account for both normative thought and language at once, with a theory of normative thought. The account of language is merely an afterthought.[73]

Section 5: Compositional Speech-Act Semantics

The speech-act theory of sentence-meaning that I began constructing in chapter two can be extended to account for complex sentences compositionally. My semantics will abstract away from many complications about how sentences get their meanings, and instead will focus on what sentence-meanings are and how they can compose together to form complex meanings.

The theory assigns a characteristic speech-act to a sentence as its meaning. A sentence's meaning is conceived of as the act (or acts) that its literal uses perform – these are the acts that the sentence is conventionally suited for being used to perform. Moreover, speech-acts are defined in terms of their essential effect, which is a change in context. So, the semantic theory is *dynamic* – sentence-meaning is context-change-potential. More specifically, the meaning of a sentence is a function from a set of contexts to a set of contexts.

There is a good reason to conceive of sentence-meaning as a function from a *set* of contexts to a *set* of contexts. There can be stages in a conversation where it is indeterminate which context is the one that accurately represents the commitments of the conversation, although it clearly is some context in a set of candidate contexts. This will be important for the account of disjunction given below.

[73] "Expressivism is crucially, then, a way of explaining some class of [psychological] judgments. Its account of public statements is an afterthought, an appeal to analogies with expressing beliefs" (Gibbard 2003, 76) (the parenthetical insertion is mine).

The meaning of a sentence will be represented formally by the difference between a set of input-contexts and a set of output-contexts. The difference is the characteristic change, and this effect defines the speech-act that the sentence is conventionally suited for being used to perform. For example, the input context C can be "updated" by a literal utterance of an ordinary declarative sentence to produce the output context C`, as in (33) or it can be updated by a literal utterance of an ordinary imperative sentence to produce the output context C``, as in (34).[74] Let 'p' denote the proposition that John will be here in ten minutes.[75]

(33) {C} ⟦'John will be here in ten minutes'⟧ = {C} [ASSERT(p)] = {C`}
(34) {C} ⟦'John, be here in ten minutes!'⟧ = {C} [COMMAND(p)] = {C``}

Speech-acts are characterized by their characteristic change on an arbitrary context. For any speech-act A, writing '{C} [A]' means the set that results from changing context C because of the success of A. Speech-acts have two fundamental components: force and content. In my notation, the force of a speech-act is specified in capital letters, and its content is specified in lower case letters in parentheses next to the force, e.g. 'ASSERT(p)'.

The content of a speech-act is a proposition, conceived of as a set of possible worlds. Propositions are the fundamental bearers of truth and falsity. An assertive speech-act is true (or false) just in case, and because, its content is true (or false). Non-assertive speech-acts cannot be true or false: if it is true that p, then the command that p is fulfilled or obeyed, but the speech-act is not itself true. For any speech-act, whether assertive or non-assertive, its content is its object, in the sense that the act involves doing something with that content.

[74] Update-style dynamic semantics was first articulated in Veltman 1996.
[75] I assume that time is a part of propositional content. Otherwise I will ignore features of sentences that involve tense, time, and indexicality.

The force of a speech-act determines what is done with its content. An assertion that p adds the information that p to the acknowledgement-list. A command that p adds that p to the command-list. These two acts have the same content, but do different things with it. They affect different parts of context.

A conversational context C consists of organized sets of propositions, which I call lists. There are four lists, corresponding to the speech-acts of asserting, commanding, and disputing each of those acts. The four lists are paired together by their mutual opposition, and hence a context is represented formally as a pair of pairs of sets of propositions.

(35) the context $C = \langle\langle AL_C, DAL_C\rangle, \langle CL_C, DCL_C\rangle\rangle$
AL_C = the acknowledgement-list of C
DAL_C = the disacknowledgement-list of C
CL_C = the command-list of C
DCL_C = the disputed-command-list of C

The context-set of C is defined as the set of worlds that results from intersecting the acknowledgement-list. The permission-set of C is defined as the set of worlds that results from intersecting the command-list. These sets (and the lists, too) are subscripted because they evolve in the course of conversation as the context changes.

(36) the context-set $CS_C = \cap AL_C$
the permission-set $PS_C = \cap CL_C$

An assertion and a command are attempts at changing a context. Such an attempt is successful if it changes the context in the way it tries to. A speech-act is not successful in a context C if its characteristic change has not been effected in C. This notion of *being successful in a context* is important, since it is playing the role in this framework that truth plays in an ordinary truth-conditional semantic framework.

The fundamental speech-acts asserting and commanding are defined by how they change an arbitrary context C. Each is a function from a set of contexts to a set of contexts.[76]

(37) $\{C\}\ [\text{ASSERT}(\varphi)] = \{ \langle\langle AL_C + \varphi, DAL_C - \varphi\rangle, \langle CL_C, DCL_C\rangle\rangle \}$
(38) $\{C\}\ [\text{COMMAND}(\varphi)] = \{ \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \varphi, DCL_C - \varphi\rangle\rangle \}$

Note that φ is an arbitrary proposition, i.e. a set of worlds, and that each of 'AL_C', 'DAL_C', etc., denotes a list, i.e. a set of propositions. The fundamental acts of asserting and commanding add their content to the relevant list and subtract the content from the list it is paired with.

Since the changes associated with the fundamental speech-acts of this system are adding and subtracting information from sets of information, I also need to define the notions of 'set-addition' and 'set-subtraction'. Set-addition, symbolized by '+', is simply the union operation. So, adding two sets together produces the minimal set whose members include each of the members of the original two sets. Set-subtraction, symbolized by '–', on the other hand, has a more particular definition: S1 – S2 produces the set S3 that involves the minimal deviation from S1 such that there is no subset of S3 whose intersection is a subset of S2. The complexity of this definition is meant to capture the claim that an act of refusing to allow the proposition that p to be a member of set S is also at least implicitly an act that refuses to allow S to be such that some of its members are propositions that together entail that p.[77]

In addition to the two fundamental speech-acts in this system, i.e. assertions and commands, there are also acts of *disputing* assertions, as well as disputes of commands. For

[76] Here, I only present the case where the input set of contexts is a singleton set. I will indicate how to expand upon this at the end of this section.
[77] I recognize that the notion of "minimal deviation" might appear problematic, since there might be more than one way of changing S1 into S3 as described. However, this is intentional. When there is more than one minimal deviation, that produces indeterminacy and multiplies the number of candidate contexts. For example, disputing a conjunctive assertive act without specifying which conjunct act is disputed changes the conversation by doubling the number of candidate contexts, one for each way of minimally changing the acknowledgement-list.

every speech-act, i.e. change in context, there is an opposite act that changes the context in an opposite way. The latter is the act of disputing the former act. This notion of dispute will serve as speech-act negation.[78]

The speech-act of disputing another act reverses the context-change of the speech-act it disputes. 'DISPUTE(_)' denotes a function from a speech-act to the opposite of that speech-act. Disputing a dispute of some act A thus reverses the reversal of A, and thus changes context in the same way as A. So, the rule of double-dispute-negation holds.

(39) For any speech-act A,

if A is ASSERT(φ),
then $\{C\}$ [DISPUTE(A)] = $\{ \langle\langle AL_C - \varphi, DAL_C + \varphi\rangle, \langle CL_C, DCL_C\rangle\rangle \}$

if A is DISPUTE(ASSERT(φ)),
then $\{C\}$ [DISPUTE(A)] = $\{ \langle\langle AL_C + \varphi, DAL_C - \varphi\rangle, \langle CL_C, DCL_C\rangle\rangle \}$
= $\{C\}$ [ASSERT(φ)]

if A is COMMAND(φ),
then $\{C\}$ [DISPUTE(A)] = $\{ \langle\langle AL_C, DAL_C\rangle, \langle CL_C - \varphi, DCL_C + \varphi\rangle\rangle \}$

if A is DISPUTE(COMMAND(φ)),
then $\{C\}$ [DISPUTE(A)] = $\{ \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \varphi, DCL_C - \varphi\rangle\rangle \}$
= $\{C\}$ [COMMAND(φ)]

An assertion that p is successful just in case a dispute of the assertion that p is not successful; this is guaranteed by the "reversing" nature of dispute. The assertion adds that p to the acknowledgement-list and removes it from the disacknowledgement-list. The dispute of the assertion that p is exactly the reverse: it removes that p from the acknowledgement-list and adds that p to the disacknowledgement-list. Similar claims hold for commanding: a command that p adds that p to the command-list and removes it from the disputed-command-list. The dispute of

[78] There are two types of negation in this framework. There is speech-act-negation, and there is also propositional-negation. In particular, for every proposition that p, there is also the proposition that ~p. Since I am assuming that propositions are sets of worlds, the meaning of '~' is the complement function.

the command that p is exactly the reverse: it removes that p from the command-list and adds it to the disputed command-list.

Assertions and commands are *simple* speech-acts. The act of disputing a simple speech-act is also a simple act. Simple acts always attempt to change a context in a determinate way, and thus they are successful just in case their particular change is effected. A simple speech-act A can be thought of as a pair of contexts <C, C`>, where the input-context C is the null-context (whose lists are empty) and C` is the output-context that includes the characteristic change of A. Quite generally, a literal use of a sentence is an attempt to change the conversational context so that it satisfies one of the output contexts conventionally associated with that sentence. The act is successful if the context includes that difference.

More precisely, a simple speech-act A, i.e. <C, C`> as just described, is *successful* in a context C* just in case C* satisfies C`. And C* *satisfies* C` just in case all the information in all of the lists contained in C` are also contained in the corresponding lists of C*. Here is an example of such a C* that satisfies the output context of an assertion that p.

(40) C = <<Ø, Ø>, <Ø, Ø>>
C` = {C} [ASSERT(p)] = { <<AL_C + {p}, DAL_C – {p}>, <CL_C, DCL_C>> }
So, C` = <<{p}, Ø>, <Ø, Ø>>

C* = { <<{p}, {q}>, <Ø, {r, s}>> }

The assertion that p is successful in C*, because it is acknowledged that p in C*. The notion of context-satisfaction can be understood in terms of redundant speech-acts: it would be redundant to assert p in a context in which the assertion that p is already successful, since the attempted change has already been effected.[79]

[79] There might be other reasons for performing a speech-act that is redundant in my intended sense, e.g. to remind someone of their commitments or to further urge them towards acting as they are supposed to.

That is enough to explain the simple speech-acts. Additionally, there are also *complex* speech-acts, some of which can be successful in more than one way and thus induce a more complex change in a conversation. Complex speech-acts are meaningful in virtue of the meanings and arrangement of their constituent parts, in the following way.

For any two speech-acts A1 and A2, there is a *conjunctive* speech-act A1^A2 which consists in performing A1 and then performing A2. The conjunctive act A1^A2 is successful just in case both A1 and A2 are successful.

Speech-act conjunction is symbolized by '^', and is a function from two speech-acts to a conjunctive act. The conjunctive act is performed by performing both conjunct acts, and is successful just in case both conjunct acts are successful.[80]

(41) $\{C\}\ [\text{ASSERT}(\varphi) \wedge \text{ASSERT}(\psi)] = \{ \langle\langle AL_C + \varphi + \psi, DAL_C - \varphi - \psi\rangle, \langle CL_C, DCL_C\rangle\rangle \}$

(42) $\{C\}\ [\text{COMMAND}(\varphi) \wedge \text{COMMAND}(\psi)] = \{ \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \varphi + \psi, DCL_C - \varphi - \psi\rangle\rangle \}$

(43) $\{C\}\ [\text{ASSERT}(\varphi) \wedge \text{COMMAND}(\psi)] = \{ \langle\langle AL_C + \varphi, DAL_C - \varphi\rangle, \langle CL_C + \psi, DCL_C - \psi\rangle\rangle \}$

It is possible to dispute a conjunctive act. The dispute of a conjunctive act is successful just in case disputing at least one conjunct act is successful. There is thus more than one way for a dispute of the conjunctive act to be successful, and correspondingly it has more than one output-context. Some clauses need to be added to the rule for disputing speech-acts. Here are two examples that make it clear what the others need to say.

[80] Although it doesn't make a difference in most cases, the order in which the speech-acts are performed matters. It is not the case that, for all speech acts A1 and A2, the conjunctive act A1^A2 is equivalent to the act A2^A1.

(44) For any speech-act A,

if A is ASSERT(φ) ^ ASSERT(ψ),
then {C} [DISPUTE(A)] =
= {C} [DISPUTE(ASSERT(φ))] ∪ {C} [DISPUTE(ASSERT(ψ))]
= { <<AL_C – φ, DAL_C + φ>, <CL_C, DCL_C>>; <<AL_C – ψ, DAL_C + ψ>, <CL_C, DCL_C>> }

if A is COMMAND(φ) ^ ASSERT(ψ),
then {C} [DISPUTE(A)] =
= {C} [DISPUTE(COMMAND(φ))] ∪ {C} [DISPUTE(ASSERT(ψ))]
= { <<AL_C, DAL_C>, <CL_C – φ, DCL_C + φ>>; <<AL_C – ψ, DAL_C + ψ>, <CL_C, DCL_C>> }

There are two ways that disputing a conjunctive act A1 ^ A2 can be successful: either A1 is not successful or A2 is not successful. A speaker who disputes a conjunctive act, without further specifying a particular conjunct to dispute, thus leaves it *indeterminate* how she is changing the context and multiplies the number of candidate contexts. (This notion of indeterminacy was introduced in chapter two section 9, as part of Lewis' problem about permission.)

Why would a speaker want to produce such indeterminacy? One reason would be that she refuses to allow both conjuncts to achieve their essential effects on context, but is willing to allow either one individually to do so. Disputing a conjunctive act thus serves as a way to steer the conversation in one of two ways while leaving it open which way (or both) it will go. Disputing A1 ^ A2 is like putting a fork in the road so as to direct the conversation in one way or another without specifying which: either the conversation can proceed with A1 disputed, or with A2 disputed, or with both A1 and also A2 disputed. And the other conversants do not have to specify which way either; they can publicly accept the dispute of the conjunctive act and thus also the indeterminacy it creates. Such a conversation would evolve in such a way as to double the number of candidate contexts.

A dispute of a conjunctive act is equivalent to a *disjunctive*-speech-act. Disputing A1 ^ A2 is equivalent to the disjunctive-speech-act, A3 v A4, where A3 is the dispute of A1 and A4 is the dispute of A2.

For any two speech-acts A1 and A2, there is a disjunctive speech-act A1 v A2. It is successful just in case at least one of its disjunct acts is successful. The output of this disjunctive speech-act, therefore, is a set that includes a context in which A1 is successful and also a distinct context in which A2 is successful. Thus, there are two ways that A1 v A2 can be successful. A successfully performed disjunctive act thus produces indeterminacy, as described, and multiplies the candidate contexts. The output of the disjunctive speech-act is the union of the outputs of its disjunct speech-acts.

(45) $\{C\}\ [\text{ASSERT}(\varphi) \text{ v } \text{ASSERT}(\psi)] =$
$= \{C\}\ [\text{ASSERT}(\varphi)] \cup \{C\}\ [\text{ASSERT}(\psi)]$
$= \{\ \langle\langle AL_C + \varphi, DAL_C - \varphi \rangle, \langle CL_C, DCL_C\rangle\rangle; \langle AL_C + \psi, DAL_C - \psi \rangle, \langle CL_C, DCL_C\rangle\rangle\ \}$

(46) $\{C\}\ [\text{COMMAND}(\varphi) \text{ v } \text{COMMAND}(\psi)] =$
$= \{C\}\ [\text{COMMAND}(\varphi)] \cup \{C\}\ [\text{COMMAND}(\psi)]$
$= \{\ \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \varphi, DCL_C - \varphi\rangle\rangle; \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \psi, DCL_C - \psi\rangle\rangle\ \}$

(47) $\{C\}\ [\text{ASSERT}(\varphi) \text{ v } \text{COMMAND}(\psi)] =$
$= \{C\}\ [\text{ASSERT}(\varphi)] \cup \{C\}\ [\text{COMMAND}(\psi)]$
$= \{\ \langle\langle AL_C + \varphi, DAL_C - \varphi\rangle, \langle CL_C, DCL_C\rangle\rangle; \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \psi, DCL_C - \psi\rangle\rangle\ \}$

The performance of a disjunctive act can only be felicitous if there is some good reason why the speaker does not instead perform a simpler act of uttering one disjunct on its own. If one *can* make the stronger move of performing one of the disjunct acts, then one *should* do so. Producing indeterminacy complicates matters in a conversation and thus should be avoided, on grounds of being cooperative, unless there is good reason for doing so.

One good reason for performing a disjunctive act would be because a speaker doesn't know which disjunct act to perform. For example, one might put forward a disjunction of imperatives such as (48) if one doesn't know which of the disjunct imperatives to put forward. If you and I have been instructed by our boss to work on a project, but you never received your instructions and I cannot remember exactly what you're supposed to do, I might use (48) to narrow down the options.

(48) 'Choose A or choose B, I don't know which.' COMMAND(p) v COMMAND(q)

The disjunctive-speech-act assigned to (48) is not the same thing as command of a disjunctive content. Those two acts attempt to change context in different ways. The disjunctive act assigned to the sentence in (48) doubles the number of candidate contexts and leaves it indeterminate whether the addressee is to choose A or instead is to choose B. It might matter a great deal which way it proceeds, but it is not yet clarified which way.

On the other hand, a successful command of a disjunctive content would change context in a determinate way, by adding a certain disjunctive proposition to the command-list. Both a command of a disjunctive content and also a disjunctive command can be used to explain a free choice imperative. For example, (49) can be interpreted as a command to make true the proposition that p or q. The success of that command would create a disjunctive obligation for some agent, which could be complied with in distinct ways.

(49) 'Choose A or choose B, it doesn't matter which.' COMMAND(p or q)

I assume that there are propositional-connectives of the ordinary truth-functional sort, in addition to the speech-act connectives I have been introducing here. I also assume that English

words like ‘not’, ‘and’, and ‘or’ can express either a speech-act-function or a propositional-function. These assumptions need to be justified, although I will not attempt a complete justification here and now.

One reason why we need to recognize speech-act-disjunction in addition to propositional-disjunction is that, arguably, sometimes ‘or’ takes wide scope with respect to sentence-moods. This would happen in a mixed-mood disjunction, e.g. (50) and (51) each mixes a simple imperative clause with a simple declarative clause.

(50) You, choose A or I will choose B
(51) John, either you go around back and wait for us or else I will find you out front at 2pm.

Finally, a dispute of a disjunctive act disputes both disjunct acts. So, it is equivalent to a conjunctive act whose conjuncts dispute those disjunct acts. The speech-act connectives thus comply with a version of DeMorgan’s transformations with speech-act-negation.

Some clauses need to be added about disputing disjunctive acts. Here are two examples.

(52) For any speech-act A,

if A is ASSERT(φ) v ASSERT(ψ),
then {C} [DISPUTE(A)] = { <<AL_C – φ – ψ, DAL_C + φ + ψ>, <CL_C, DCL_C>> }
= {C} [DISPUTE(ASSERT(φ)) ^ DISPUTE(ASSERT(ψ))]

if A is COMMAND(φ) v ASSERT(ψ),
then {C} [DISPUTE(A)] = { <<AL_C – ψ, DAL_C + ψ>, <CL_C – φ, DCL_C + φ>> }
={C} [DISPUTE(COMMAND(φ)) ^ DISPUTE(ASSERT(ψ))]

The meanings of the speech-act connectives ‘^’ and ‘v’ are, like the force of disputing, functions from speech-acts to speech-acts. Saturating the arguments of such functions produces a speech-act. So, quite generally, the meaning of any sentence in the language, whether simple or complex, is a speech-act; that is, a function from a set of contexts to a set of contexts. And the

meanings of complex sentences are complex speech-acts that are composed from the meanings of the simpler parts of the sentence and their arrangement.

This completes the account of complex speech-acts, and thus the account of all the speech-acts recognized in this system. It only remains to generalize some of the preceding remarks so as to cover cases in which it is unclear which context tracks the commitments of a conversation.

I have presented these definitions of speech-acts in terms of the difference between an input set of contexts and an output set of contexts. But I have only specified the case where the input set is a singleton set. This is easily expanded upon, in order to account for cases in which there is more than one context in the input set, although the result looks rather complicated. So, I will just show two examples here, for the fundamental acts of asserting and commanding.

Updating a set of contexts with the success of a speech-act involves updating each candidate context in that set with the success of that speech-act.

(53) $\{C_1, \ldots, C_n\}$ [ASSERT(φ)] =
$= \{ \langle\langle AL_{C1} + \varphi, DAL_{C1} - \varphi\rangle, \langle CL_{C1}, DCL_{C1}\rangle\rangle; \ldots$
$\ldots; \langle\langle AL_{Cn} + \varphi, DAL_{Cn} - \varphi\rangle, \langle CL_{Cn}, DCL_{Cn}\rangle\rangle \}$

(54) $\{C_1, \ldots, C_n\}$ [COMMAND(φ)] =
$= \{ \langle\langle AL_{C1}, DAL_{C1}\rangle, \langle CL_{C1} + \varphi, DCL_{C1} - \varphi\rangle\rangle; \ldots$
$\ldots; \langle\langle AL_{Cn}, DAL_{Cn}\rangle, \langle CL_{Cn} + \varphi, DCL_{Cn} - \varphi\rangle\rangle \}$

Also, I need to generalize the definition of a speech-act's being successful-in-a-context: a speech-act is *successful-in-a-set-of-contexts* just in case it is successful in every candidate context in that set.

A conversation will tend to evolve in such a way as to ensure that the speech-acts that have been performed in that conversation remain successful. Speakers can disrupt the flow of a

conversation by disputing acts that have come before. But the effect of that dispute will be minimal. For example, as illustrated below in (55), if the disjunctive speech-act ASSERT(p) v ASSERT(q) is successfully performed, ensuring that there are the two candidate contexts at t1, and then later at t2 someone has successfully disputed the assertion that p, then the conversation proceeds by retaining the success of the disjunctive speech-act, which involves eliminating one of the candidate contexts.

(55) t1 { <<{p}, Ø>, <Ø, Ø>>; <<{q}, Ø>, <Ø, Ø>> }
t2 { <<{q}, {p}>, <Ø, Ø>> }

The act of disputing subtracts that p from the acknowledgement-list of each candidate context and adds it to each disacknowledgement-list, but that changes the first candidate context in such a way that the disjunctive speech-act would no longer be successful in that set of contexts, and thus the first candidate context drops out of the set.

Section 6: Inferring Speech-Acts

Section 6.1: Entailment and Inference

The most familiar notion of entailment is formulated in terms of truth: the truth of the premises guarantees the truth of the conclusion. But that applies to propositions rather than to speech-acts. Moreover, the framework I've been constructing includes non-assertive speech-acts which cannot be true or false. So, I need a different notion of entailment to explain the relation of one sentence following from another, in terms of a relation between the speech-acts assigned to them as their semantic values.

The notion of a speech-act's being *successful* plays the role, for speech-acts, that truth plays for propositions. Speech-act entailment, therefore, should be conceived of in terms of how the success of one act is guaranteed by the success of another. I defined this notion of success in terms of context-satisfaction, and I will also use it to explain speech-act entailment.

A context C satisfies C` just in case all the information in all of the lists contained in C` are also contained in the corresponding lists of C. For an example of speech-act-entailment, assume that C does indeed satisfy C`, that C is the output context of speech act A1, and also that C` is an output context of A2. In that case, A1 speech-act-entails A2, since updating a context with A1 guarantees the success of A2.

More generally, an act A speech-act-entails A` just in case, given an arbitrary input context C, there is an output context of A` such that *every* output context of A satisfies it. The quantifiers in this definition of speech-act entailment are needed because of the fact that some speech-acts have multiple output-contexts. A set of speech-acts can jointly entail an act A` just in case the success of each speech-act in that set, at a single time, guarantees the success of A`.

This notion of speech-act-entailment is rather strict. It excludes cases in which the speakers in a conversation are "committed" to accepting a sentence, given that the constitutive goals of communication involve avoiding absurd contexts. We should distinguish *entailment*, as I have defined it, from the weaker notion of *rational inference*. A speech-act F(p) is rationally inferable from a context just in case successfully performing F(~p) would produce an absurd context, by either rendering the context-set or the permission-set empty. All speech-act entailments are rationally inferable, but some rationally inferable acts are not entailed. The difference between them corresponds to differences in how the context-set and the permission-set are determined.

The pieces of information on the lists in context function as *constraints* on the context-set and the permission-set. When the information that p is on the acknowledgement-list, that ensures that every possible world in the context-set is a p-world. But suppose that q is a proposition-entailment from that p. If so, then in virtue of that p being a member of AL, every possible world in the context-set is also a q-world. In that case, the conversants are *committed* to the assertion that q, even though the proposition that q is not itself a member of AL. The commitments of a conversation are more than those commitments which are directly marked as constraints in the context.

When that p is a constraint on the context-set, the assertion that p is entailed in that context. Moreover, in that case, it would be totally *redundant* to perform the assertion that p; doing so would not change the context in any way. But when that q is merely a commitment of the context-set, and not also a constraint, it wouldn't be totally redundant to perform the assertion that p; doing so would not change the context-set, but it would change the acknowledgement-list by adding that q to it. That would create a new constraint on the context-set, even though it wouldn't change the commitments. Since constraints can be added and subtracted over time, this difference matters.

For example, suppose we start with a null context and then arrive at a stage of the context in which it is asserted that ~p and it is also asserted that p or q, i.e (57). This is a case where the context-set is committed to acknowledging that q (every world in the context-set is a q-world) even though it isn't acknowledged that q since that q isn't a member of AL.

(56) {C} [ASSERT(~p) ^ ASSERT(p or q)] =
= { <<AL_C + ~p + (p or q), DAL_C – p – (p or q)>, <CL_C, DCL_C>> }

(57) { <<{~p, p or q}, Ø>, <Ø, Ø>> }

Still, the assertion that q is rationally inferable, since asserting that ~q would straightforwardly render the context-set empty, by adding a piece of information to the acknowledgment-list that contradicts the other information already there. Additionally, if one were to dispute the assertion that q, after having successfully performed an assertion that p and an assertion that p or q, the success of the most recent act would render one of the earlier two unsuccessful. Since taking back either of the earlier acts constitutes a minimal change to ensure the success of the assertion that q, this would double the number of candidate contexts and produce indeterminacy. Essentially, the effect of disputing the assertion that q, with that conversational history, is to dispute the conjunction of the two earlier acts. No rational conversant could deny or dispute the assertion that q, without taking back a commitment of the conversation. But even fully rational conversants might fail to realize all the commitments of their conversation.

Both the notion of speech-act entailment and the notion of rational inference defined here serve important purposes in explaining the behavior of rational participants of a conversation. Together they validate commonly accepted rules of inference, as I will now explain.

The rule of double negation holds, as I have mentioned in the previous section. Since disputing the dispute of a speech-act attempts to change context in the very way that the original speech-act attempts to change it, it would be totally redundant to perform the double disputing act in a context in which the original speech-act is already successful. For example, the success of the assertion that p is sufficient for the success of the act of disputing the dispute of the assertion that p, and thus constitutes an example of speech-act-entailment.

The rule of conjunction elimination holds. If the conjunctive act ASSERT(p) ^ ASSERT(q) is successful, that is sufficient for each of the conjunct acts to be successful.

The rule of disjunction introduction holds. If the assertion that p is successful, that is sufficient for any disjunctive-speech-act to be successful that has the assertion that p as a disjunct.

For any speech-acts A1 and A2, such that A1 speech-act-entails A2, the act of disputing A2 is sufficient for disputing A1. That is, an act of disputing some speech-act is sufficient for at least implicitly disputing any speech-act which entails it.

Also, for any force F and content p, an act of disputing F(p) is sufficient for disputing any act with force F and any content which entails that p.

Section 6.2: Ross's paradox

The ideas in section 5 and 6 allow for a nuanced reply to Alf Ross's "paradox" about imperative entailment. Ross claimed that 'Mail the letter!' does not entail 'Mail the letter or burn the letter!', because the latter imperative seems to permit that one burn the letter, while the former imperative does not. In response, I think that there is no paradox, but there is an important distinction about scope that should be made explicit. The disjunctive sentence in question either has 'or' taking narrow scope with respect to the imperative mood, as in (59b), or else it has 'or' taking wide scope with respect to it, as in (60b). The scope ambiguity matters a lot for the issue that Ross was concerned about.

(58a) Mail the letter!
(58b) COMMAND(p)

(59a) Mail the letter or burn the letter! (disjunctive imperative)
(59b) COMMAND(p or q)

(60a) Mail the letter or burn the letter! (disjunction of imperatives)
(60b) COMMAND(p) v COMMAND(q)

The meaning of (58a) is (58b). It does not entail (59b), which functions to make it required that either x mails the letter or x burns the letter, which might seem to permit burning the letter.[81] The purportedly offensive entailment is from (58a) to (59a), interpreted as (59b), and that does not follow on my view.

Moreover, there is nothing offensive about the fact that (59b) is rationally inferable from (58b): assuming the success of the command that p, every possible world in the permission-set is a p-world and therefore every possible world in the permission-set is a p-or-q-world, too. If one is committed to the permissibility of that p, then one is certainly also committed to the permissibility of that p or q. But that doesn't imply that it is permissible to make it the case that q, and in the intended context burning the letter is surely supposed to be impermissible. It would be *odd* to utter sentence (59a) in such a context, but that's because it would be odd to attempt to ensure that it is required to bring about that p or q, when it is impermissible to bring about that q.

(58b) does entail (60b), but there is nothing objectionable about that. The success of commanding that x mail the letter creates a requirement for x to mail the letter, and thus guarantees either that x is required to mail the letter or else x is required to burn the letter. Even if (60b) were successfully performed, that would not permit burning the letter; it would only ensure that the conversation proceeds in one of two ways, either with a requirement for x to mail the letter or else with a requirement for x to burn the letter. It would be odd to first utter (58a) and then (60a), even though the former entails the latter, because it is only felicitous to perform a

[81] In fact, I don't think that (59a), interpreted as (59b), permits burning the letter. (59b) *seems* to countenance burning the letter as an option, since the only way to comply with the command in (59b) is either to mail the letter or to burn the letter, and if the command is successful then the relevant agent has to do one of those. But that's just to say that it is required that the agent do one of those, which falls short of saying that both are permissible options. The permissibility of those alternatives depends upon what other commands and permissions have been given. In order for it to be permitted that one burn the letter, the command to not burn the letter would have to be disputed.

disjunctive speech-act if one has some reason not to utter the first disjunct on its own. (See the end of section 5 for more discussion of disjunctions of imperatives.)

Section 7: Composition and Inference with Directive Declaratives

Section 7.1: The meanings of directive declaratives

The speech-act semantics constructed in the previous three sections accounts for the meanings of ordinary declarative sentences in terms of assertive speech-acts, and accounts for the meanings of ordinary imperative sentences in terms of commanding speech-acts. This apparently reflects a strict division of semantic labor between those sentence-types, but this stricture can be relaxed.

The semantics can be expanded to include declarative sentences that are conventionally suited for imperatival speech-acts. This is the role played by normative sentences such as 'John must be here in ten minutes' in my semantic framework.

I argued in chapter one that deontic 'must' and 'may' have distinctive connections with imperative sentences, as witnessed by several groups of linguistic data. I explained such data in chapter two with a theory on which certain normative sentences are conventionally suited for asserting and also for a directive act such as commanding or permitting.

Now, I need to explain how such directive declaratives fit into the compositional framework constructed in the previous three sections.

As I indicated in chapter two section 3, a normative sentence like (61) is a special type of declarative that is suited for *both* asserting and commanding, and it is also suited for *each* of those acts individually. Deontic 'must' contributes both to the informational content of the

assertion, and also contributes the commanding force that is otherwise not present in declarative sentences. The conventional meaning of (61) assigns it a *hybrid speech-act* that has both an assertive and a non-assertive component.

I use the symbol '|' for a speech-act connective that creates a hybrid speech-act.[82] Its value is a single speech-act with distinct components that can be detached from one another, although the default assumption is that both component-acts are performed on a literal use of the sentence.

(61) John must be here in ten minutes ASSERT(that Must(p))|COMMAND(that p)

Similarly, deontic 'may' contributes to both the force and content of sentences it occurs in, and thus is suited for asserting, and for permitting (i.e. disputing a command), and therefore is suited for both.

(62) John may perform act A ASSERT(that May(q))|DISPUTE(COMMAND(that ~q))

Because (61) is suited for a hybrid speech-act it is context-sensitive in a somewhat peculiar way: if the context includes an overt or salient restrictor for the modal, then a literal utterance of sentence (61) constitutes an assertive act; if there is no salient restrictor in the context other than the command-list, then a literal utterance of (61) constitutes, by default, both an assertion and a command; and if there is special focus on what to do, a literal utterance of (61)

[82] '|' does not mean the same as '^'. For one thing, these functions differ about the times of their arguments. Performing a hybrid speech-act A1|A2 performs both A1 and A2 at the same time, whereas performing a conjunctive speech act A1^A2 perform each sequentially, first one and then the other. More importantly, a hybrid speech-act A1|A2 serves as the semantic value of a sentence that is suited for performing each of A1 and A2 individually, whereas A1^A2 serves as the semantic value of sentences that are merely suited for performing both. But '|' also does not mean the same as 'v', since A1vA2 does not serve as the semantic value for sentences that are suited for performing A1, A2, and also both A1 and A2. That is, although a disjunctive act is successful when either or both of its disjunct acts are successful, a sentence suited for the disjunctive act is not thereby suited for performing either or both disjunct acts. A sentence suited for the hybrid act A1|A2 is suited for each component act and also for both.

can constitute only a command. (This final, merely nonassertive use, is somewhat marginal, since the command-list is always available to serve as the conversational background for an assertive use of a sentence like (61).)

Since the meaning of (61) is a hybrid speech-act, there are three ways of using it literally. One can either assert that John must be here in ten minutes, or one can command that John be here in ten minutes, or one can do both. One performs both of the acts that the sentence is suited for on what I call its *standard* interpretation.[83]

The merely descriptive interpretation of deontic 'Must(p)':
Let 'd' denote the proposition assigned to 'Must(p)' in C

(63) {C} ['Must(p)'] = ASSERT(d)
$=\{ \langle\langle AL_C + \{d\}, DAL_C - \{d\}\rangle, \langle CL_C, DCL_C\rangle\rangle \}$

The merely non-descriptive use of deontic 'Must(p)':
(64) {C} ['Must(p)'] = COMMAND(p)
$=\{ \langle\langle AL_C, DAL_C\rangle, \langle CL_C + \{p\}, DCL_C - \{p\}\rangle\rangle \}$

The standard interpretation of deontic 'Must(p)':
Let 's' denote the proposition standardly assigned to 'Must(p)' in C

(65) {C} ['Must(p)'] = ASSERT(s)|COMMAND(p)
$=\{ \langle\langle AL_C + \{s\}, DAL_C - \{s\}\rangle, \langle CL_C + \{p\}, DCL_C - \{p\}\rangle\rangle \}$

I am not proposing a view on which sentences like (61) and (62) are *ambiguous* between assertive and non-assertive meanings. Instead, each sentence has a single, hybrid meaning. The assertive and non-assertive components of such meanings can nevertheless be *detached* from one another; e.g., this happens in a merely descriptive use of (61) which only serves to convey information rather than also directing action.

[83] Notice that there is a difference in the assertive contents of the standard interpretation and the merely descriptive interpretations. They employ different conversational backgrounds, as explained in chapter two section 6.

On the *standard* interpretation of sentences like (61) and (62), their contextually supplied conversational background is the command-list and utterances of them would perform both the assertion and also the directive act for which they are suited. (See chapter two section 6.) Asserting the information that is associated with 'must(p)' on its standard interpretation is a special kind of assertion; it asserts a claim about the conversational commitments. If the assertion succeeds, then the command-list must be the way that it is asserted to be, and thus the command that p is successful. Likewise, if the command that p is successful, and this is an acknowledged fact in the conversation, then it follows that the standard assertion of 'must(p)' is successful.

The standard interpretation is justified by default, and is specified in the linguistic conventions governing the use of deontic 'must' and 'may'. Nevertheless, one can literally (yet non-standardly) use a sentence like (61) or (62) to merely assert, or to merely direct.

Section 7.2: Composing directive declaratives

When a sentence like (61) or (62) occurs as a constituent clause in a more complex sentence, it retains its hybrid meaning although sometimes only one component of that hybrid meaning composes. Conjunctions and disjunctions will be sufficient to show the options for composing normative clauses with nonnormative ones. (Negations of normative sentences were addressed in section 3.1 of this chapter.)

Since there are two types of conjunction, and two types of disjunction, there are four ways of combining normative clauses into conjunctions and disjunctions. Perhaps surprisingly, the cases involving propositional-connectives are more complicated than those involving speech-act-connectives. I will focus on how normative clauses can be combined with other clauses,

since those are the most complicated cases. Also, I will explain the composition of such complex sentences using the standard interpretations of the normative clauses, since the other interpretations (merely descriptive, merely non-descriptive) can be figured out more straightforwardly.

There are two ways of conjoining normative clauses, corresponding to speech-act-conjunction and propositional-conjunction. Applying speech-act-conjunction to two clauses is simply a way to form a single sentence that is suited for performing all the acts that the conjuncts are suited for. (Let p be the proposition that John will be here in ten minutes, and let q be the proposition that Jim will be here to greet John.)

Speech-act-conjunction with a normative clause
(66a) John will be here in ten minutes and Jim must be here to greet John.
(66b) ASSERT(p) ^ (ASSERT(Must(q))|COMMAND(q))

(66c) {C} ⟦'John will be here in ten minutes and Jim must be here to greet John'⟧
= { <<AL_C + p + Must(q), DAL_C – p – Must(q)>, <CL_C + q, DCL_C – q>> }

Propositional conjunction can only coordinate clauses with the same force, because it functions to combine the contents of two speech-acts into a single content joined with a single type of force. A hybrid meaning has two types of force, and so there are two ways that propositional conjunction can apply to it: it can combine assertive contents or it can combine non-assertive contents. Whenever propositional conjunction is applied to a normative clause, only one component of that clause's hybrid meaning undergoes the compositional change. The other component is still there, although it is compositionally idle. It projects up into the more complex meaning because conjunction is a "projection hole".[84] For example, a sentence like

[84] The notions of projection holes and projection plugs comes from the literature on the projection of presuppositions and conventional implicatures. They are used to classify complex sentences, based on whether certain features of the constituent clauses are inherited by the more complex sentences they occur in.

(67a), interpreted as (67b), is suited for asserting a conjunctive proposition and also for commanding. Likewise, a sentence like (68a), interpreted as (68b), is suited for commanding a conjunctive proposition and also for asserting.

Propositional-conjunction with a normative clause
(67a) John will be here in ten minutes and Jim must be here to greet John
(67b) ASSERT(p and Must(q))|COMMAND(q)

(67c) {C} ⟦'John will be here in ten minutes and Jim must be here to greet John'⟧
= { $<<AL_C$ + (p and Must(q)), DAL_C – (p and Must(q))>, $<CL_C$ + q, DCL_C – q>> }

(68a) John, be here in ten minutes and, Jim, you must be here to greet John!
(68b) COMMAND(p and q)|ASSERT(Must(q))

(68c) {C} ⟦'John, be here in ten minutes and, Jim, you must be here to greet John!'⟧
= { $<<AL_C$ + (Must(q)), DAL_C – (Must(q))>, $<CL_C$ + (p and q), DCL_C – (p and q)>> }

There are also two ways of disjoining normative clauses, corresponding to speech-act-disjunction and propositional-disjunction. Applying speech-act-disjunction to two clauses is a way to form a single sentence that is suited for doubling the number of candidate contexts, one for the success of each clause. (Let g be the proposition that Jim will turn himself in.)

Speech-act-disjunction with a normative clause
(69a) John will be here in ten minutes or Jim must turn himself in
(69b) ASSERT(p) v (ASSERT(Must(g))|COMMAND(g))

(69c) {C} ⟦'John will be here in ten minutes or Jim must turn himself in'⟧
= { $<<AL_C$ + p, DAL_C – p >, $<CL_C$, DCL_C>>;
$<AL_C$ + Must(g), DAL_C – Must(g) >, $<CL_C$ + g, DCL_C – g>> }

Propositional disjunction can only coordinate clauses with the same force, because it functions to combine the contents of two speech-acts into a single content joined with a single type of force. Since a hybrid meaning has two types of force, there are two ways that

propositional disjunction can apply to it: it can combine assertive contents or it can combine non-assertive contents, but it won't mix contents that originally are joined with different types of force. Whenever propositional disjunction is applied to a normative clause, only one component of that clause's hybrid meaning undergoes the compositional change. The other component is "plugged" and does not project to the more complex meaning. In a sense, it is still there in the normative clause, since that clause is still suited for the hybrid act, but the disjunctive sentence is not itself suited for performing the hybrid act. For example, a successful, felicitous, and literal use of a sentence like (70a), interpreted as (70b), only changes the acknowledgement-list. Likewise, (71a), interpreted as (71b), is merely nonassertive and only is suited for changing the command-list.

Propositional-disjunction with a normative clause
(70a) John will be here in ten minutes or Jim must turn himself in
(70b) ASSERT(p or Must(g))

(70c) {C} ⟦'John will be here in ten minutes or Jim must turn himself in'⟧
= { $<<AL_C + (p \text{ or } Must(g)), DAL_C - (p \text{ or } Must(g))>, <CL_C, DCL_C>>$ }

(71a) John, be here in ten minutes or Jim must turn himself in
(71b) COMMAND(p or g)

(71c) {C} ⟦'John will be here in ten minutes or Jim must turn himself in'⟧
= { $<<AL_C, DAL_C>, <CL_C + (p \text{ or } g), DCL_C - (p \text{ or } g)>>$ }

Section 7.3: Inference with directive declaratives

In order to set up an explanation of how using disjunction elimination can validly infer a normative conclusion, I'm going to first explain how disjunction elimination works.

As I explained in section 6, I use speech-act-entailment in order to explain how one sentence follows from another. S entails S` just in case the success of the speech-act that S is

suited for guarantees the success of the speech-act that S` is suited for. A set of premise-sentences entails a conclusion-sentence just in case the success of each premise, at a single time, guarantees the success of the conclusion.

However, entailment is a rather strict notion that excludes some of the implicit commitments of rational conversants. It is the notion of rational inference, or *valid inference*, that more accurately tracks what rational conversants, who avoid absurd contexts, are committed to in a conversation.

A speech-act F(p) is a *valid inference* from a set of other speech-acts just in case performing an act with the same force and opposite content, F(~p), while holding fixed the success of each speech-act in that set, would produce an absurd context. (An absurd context has an empty context-set or permission-set.) Any speech-act that is entailed by a set of speech-acts is also validly inferable from that set, but some speech-acts that are validly inferable from a set of speech-acts are not entailed by that set.

Of course, a complete account of how inference works needs to thoroughly explain which inference rules are valid and which are not. Here, I will be more narrowly concerned to show how a normative conclusion can be validly inferred using disjunction elimination.

Given the ordinary truth-functions for 'or' and '~', the following patterns of inference are valid:

(72a) ASSERT(p or q)
ASSERT(~p)
So: ASSERT(q)

(72b) COMMAND(p or q)
COMMAND(~p)
So: COMMAND(q)

In (72a) and (72b), if one were to successfully perform the assertion that ~q or the command that ~q, while holding the success of the premises fixed, then one would render either

the context-set or the permission-set empty. The premises do not guarantee the success of the conclusion, but they do ensure that the conclusion is a commitment of rational conversants who accept the premises.

Given the definition of the speech-act disputing, and the definition of disjunctive speech-act, it is clear that they can team up for disjunctive-speech-act elimination, as follows:

(73a) ASSERT(p) v ASSERT(q)
DISPUTE(ASSERT(p))
So: ASSERT(q)

(73b) COMMAND(p) v ASSERT(q)
DISPUTE(ASSERT(q))
So: COMMAND(p)

The conclusion follows from the premises, in both (73a) and (73b), since the success of the disjunctive speech-act requires that at least one of its disjunct-acts is successful and the success of the disputing speech-act ensures that one of those disjuncts is not successful. These are cases of speech-act-entailment, and thus they are also valid inferences.

Finally, one can also mix propositional- and speech-act-functions to produce a valid inference. A disjunctive speech-act can team up with content-negation to validly infer a disjunct. If one were to successfully command that ~p, while holding fixed the success of the premises in (74), that would produce a set of candidate contexts all of which are absurd. So, the conclusion of (74) is a valid inference, although it is not speech-act-entailed by the premises.

(74) ASSERT(p) v COMMAND(q)
ASSERT(~p)
So: COMMAND(q)

Also, propositional-disjunction can team up with speech-act-negation. If one were to assert that ~q while holding the success of the premises in (75) fixed, that would produce a set of contexts all of which are absurd. The success of the first premise adds the proposition that p or q

to AL and the success of the second premise ensures that the members of AL do not together entail the assertion that p. So, an assertion that ~q would either render the second premise unsuccessful or else it would render the context-set empty.

(75) ASSERT(p or q)
DISPUTE(ASSERT(p))
So: ASSERT(q)

An inference of a normative sentence using disjunction elimination follows one or another of these patterns of inference without a hitch.

For the case of speech-act-disjunction, it doesn't matter whether the minor premise (77a) involves content-negation or speech-act-negation – either way the conclusion (78a) is a valid inference from the premises. If one were to successfully perform the assertion that ~Must(g) or the command that ~g, while holding fixed the success of the premises, that would produce an absurd context.

<u>Speech-act-disjunction elimination with a normative clause</u>
(76a) John will be here in ten minutes or Jim must turn himself in
(76b) ASSERT(p) v (ASSERT(Must(g))|COMMAND(g))

(77a) It's not the case that John will be here in ten minutes
(77b) ASSERT(~p)
(77c) DISPUTE(ASSERT(p))

(78a) So, Jim must turn himself in
(78b) ASSERT(Must(g))|COMMAND(g)

It also does not matter for the case of propositional-disjunction elimination whether the minor premise involves content-negation or speech-act-negation. Either way, (79) – (81) is a valid inference. What is distinctive about this case is that the conclusion, (81a), interpreted as (81b), which is the assertion of a normative content, is sufficient to guarantee the success of a

nonassertive act, provided that deontic ‘must’ is interpreted standardly. In that case, a set of merely assertive premises entails a performative conclusion.

Propositional-disjunction elimination with an assertive normative clause
(79a) John will be here in ten minutes or Jim must turn himself in
(79b) ASSERT(p or Must(g))

(80a) It’s not the case that John will be here in ten minutes
(80b) ASSERT(~p)
(80c) DISPUTE(ASSERT(p))

(81a) So, Jim must turn himself in
(81b) ASSERT(Must(g))

Finally, for the case of propositional-disjunction elimination with imperative sentences, the normative constituent clause in (82a) is understood nonassertively in order for it to compose with the imperative clause. There are two ways to validly infer the desired conclusion (85): either dispute the other disjunct with a permissive sentence, as in (83), or else contradict it with the opposite command, as in (84). Note, though, that the permissive sentence (83a) has to be used nonassertively, or else it won’t produce a valid inference.

Propositional-disjunction elimination with a non-assertive normative clause
(82a) John, be here in ten minutes or Jim must turn himself in
(82b) COMMAND(p or g)

(83a) John may refrain from being here in ten minutes.
(83b) DISPUTE(COMMAND(p))

(84a) John, don’t be here in ten minutes!
(84b) COMMAND(~p)

(85a) So, Jim must turn himself in
(85b) COMMAND(g)

Conclusion

The main purpose of chapter three has been to respond to the challenge from Geach that nondescriptivism cannot respect the principle of compositionality and the distinction between force and content. My response is a compositional semantic framework that includes both force and content as components of sentence-meaning.

Geach's objection focused on semantic properties like inconsistency and valid inference. He thought that a view such as Hare 1952, which appealed to speech-acts to explain the meaning of evaluative language, could not adequately account for obvious facts like how a normative sentence and its external negation are inconsistent. In response, I have shown how they are inconsistent (section 3.1) and I have shown how normative sentences can figure in valid inferences (section 8.3).

A subsidiary purpose of this chapter has been to compare the speech-act version of nondescriptivism with expressivist versions. I argued that expressivists' problems with negations are more worrisome than the corresponding issues for the speech-act view. They are serious problems for expressivist views like the view of Gibbard 2003, although they do not necessarily refute the more general expressivist project (section 4.2).

The result of this chapter is that the speech-act version of nondescriptivism is a viable semantic theory of normative language which fits into a broader account of modal semantics that integrates the meanings of mood and modality.

BIBLIOGRAPHY

Aikhenvald, Alexandra 2010 *Imperatives and Commands*

Beaney, Michael 1997 *The Frege Reader*

Blackburn, Simon 1988 "Attitudes and Contents" *Ethics*, Vol. 98, No. 3, p. 501-517

Blackburn, Simon 1998 *Ruling Passions*

Castaneda, Hector-Neri 1963 "Imperatives, decisions, and 'oughts': a logico-metaphysical investigation" in *Morality and the Language of Conduct* edited by Castaneda and Nakhnikian

Chierchia, Gennaro and McConnell-Ginet, Sally 1990 *Meaning and Grammar: An Introduction to Semantics*

Dreier, James 2006a "Negation for Expressivists: a collection of problems with a suggestion for their solution" in Shafer-Landau ed *Oxford Studies in Metaethics* vol 1 OUP

Dreier, James 2006b "Disagreeing (about) what to do: negation and completeness in Gibbard's norm-expressivism" *Philosophy and Phenomenological Research* vol LXXII no 3

Faller, Martina (forthcoming) "Evidentiality Below and Above Speech-Acts" in Paradis and Egberg (eds) *Functions of Language*

Frege, Gottlob 1906 "A Brief Survey of my Logical Doctrines" reprinted in Beaney 1997

Frege, Gottlob 1918 "Thought" reprinted in Beaney1997

Geach, Peter 1960 "Ascriptivism" *Philosophical Review*

Geach, Peter 1965 "Assertion" *Philosophical Review*

Gibbard, Allan 1990 *Wise Choices, Apt Feelings*

Gibbard, Allan 2003 *Thinking How to Live*

Groenendijk, Jeroen and Stokhof, Martin 1994 "Questions" in Van Benthem and Ter Meulen (eds) *Handbook of Logic and Language*

Hamblin, C. L. 1958 "Questions" *Australasian Journal of Philosophy* 36(3): 159-168

Hare, R. M. 1952 *The Language of Morals*

Hare, R. M. 1970 "Meaning and Speech-Acts" *Philosophical Review*

Higginbotham, James 1996 "The Semantics of Questions" in Lappin (ed) *The Handbook of Contemporary Semantic Theory*

Horgan, Terry and Timmons, Mark 2006 "Cognitivist Expressivism" in *Metaethics after Moore*

Kartunnen, Lauri 1977 "Syntax and Semantics of Questions" *Linguistics and Philosophy* 1, 1-44

Konig, Ekkehard and Siemund, Peter 2007 "Speech Act Distinctions in Grammar" in Shopen 2007, 276-324

Kratzer, Angelika 1977 "What *must* and *can* must and can mean" *Linguistics and Philosophy* 1, 337-355

Kratzer, Angelika 1981 "The Notional Category of Modality" in Eikmeyer and Rieser (eds) *Words, Worlds, and Contexts* pp. 38-74

Lewis, David and Lewis, Stephanie 1975 Review of Olson and Paul *Contemporary Philosophy in Scandinavia, Theoria* 41: 39-60

Lewis, David 1979a "Scorekeeping in a Language Game" *Journal of Philosophical Logic* 8:3, 339-359

Lewis, David 1979b "A Problem about Permission" in Saarinen, Hilpinen, Niiniluoto, and Provence (eds) *Essays in Honour of Jaako Hintikka*, 163-175

MacFarlane, John 2011 "Epistemic Modals are Assessment-Sensitive" in Egan and Weatherson (eds) *Epistemic Modality*

Ninan, Dilip 2005 "Two Puzzles About Deontic Necessity" *New Work on Modality* MIT Working Papers in Linguistics, 51 edited by Gajewski, Hacquard, Nickel, and Yalcin

Palmer, Frank 2001 *Mood and Modality*

Papafragou, Anna 2000 *Modality: Issues in the Semantics-Pragmatics Interface*

Papafragou, Anna 2006 "Epistemic Modality and Truth-Conditions" *Lingua* 116: 1688-1702

Portner, Paul 2009 *Modality*

Roberts, Craige 2004 "Context in Dynamic Interpretation" in Horn and Ward (eds) *The Handbook of Pragmatics*

Sadock, Jerrold M., and Zwicky, Arnold 1985 "Speech act distinctions in syntax" In Shopen 1985 155–196

Schroeder, Mark 2008a *Being For: Evaluating the Semantic Program of Expressivism* OUP

Schroeder, Mark 2008b "What is the Frege-Geach problem?" *Philosophy Compass* 3/4, 703-720

Schroeder, Mark 2008c "Expression for Expressivists" *Philosophy and Phenomenological Research* 76(1): 86-116

Searle, John 1962 “Meaning and speech-acts” *Philosophical Review*

Searle, John 1969 *Speech-Acts: An Essay in the Philosophy of Language*

Searle, John and Vanderveken, Daniel 1985 *Foundations of Illocutionary Logic*

Shopen, Timothy (ed) 1985 *Language Typology and Syntactic Description: Clause Structure* Volume 1, 1st edition

Shopen, Timothy (ed) 2007 *Language Typology and Syntactic Description: Clause Structure* Volume 1, 2nd edition

Simons, Mandy 2007 “Observations on embedding verbs, evidentiality, and presupposition” *Lingua* 117(6), 1034-1056

Sloman, Aaron 1970 “*Ought* and *Better*” Mind, 79 (315): 385 – 394

Stalnaker, Robert 1978 “Assertion” reproduced in *Context and Content*

Stalnaker, Robert 1999 *Context and Content*

Stalnaker, Robert 2002 “Common Ground” *Linguistics and Philosophy* 25: 701-721

Stevenson, C. L. 1937 “The emotive meaning of ethical terms” *Mind* New Series, Vol. 46, No. 181, pp. 14-31

Stevenson, C. L. 1944 *Ethics and Language*

Unwin, Nicholas 2001 “Norms and negation: a problem for Gibbard’s logic” *Philosophical Quarterly* 49, p. 60-75

Von Fintel and Iatridou 2008 “How to Say *Ought* in Foreign: the Composition of Weak Necessity Modals” in Gueron and Lecarme (eds) *Time and Modality*, 115-141

Van Roojen, Mark 2010 “A fork in the road for expressivism” *Ethics* vol 120, no 2, p. 357-381

Veltman, Frank 1996 *Journal of Philosophical Logic* 25:221-261